

SEPTEMBER 1981

\$1.75

THE Atlantic

SALMAN RUSHDIE / IAN FRAZIER / RAYMOND CARVER / HOLLY BRUBACH / JAMES WOLCOTT

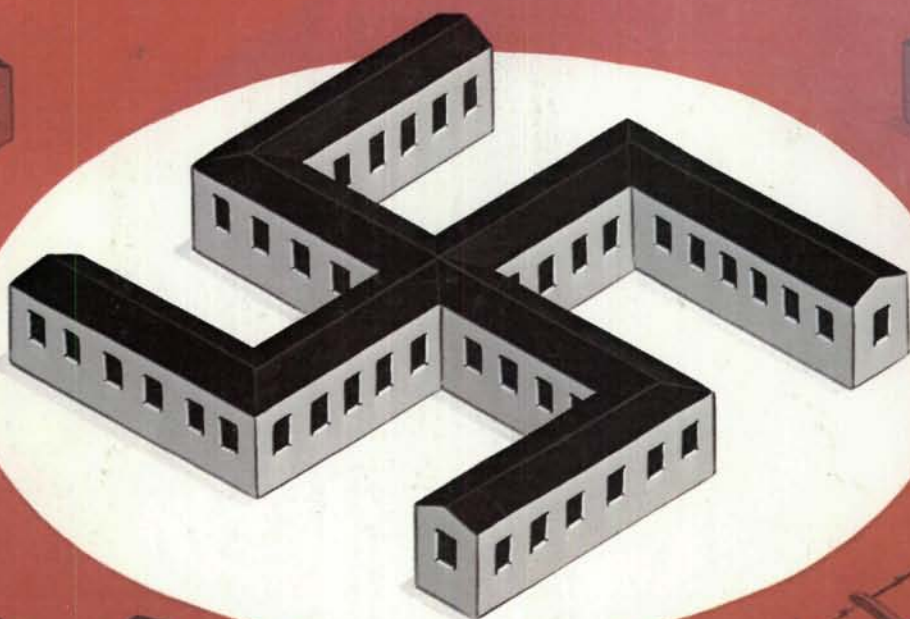
THE KINGDOM OF AUSCHWITZ

BY OTTO FRIEDRICH

AUG 20 1981

AMBASSADOR
COLLEGE LIBRARY

300316 LAB A0000099 R44B NOV82
09 CTY
AMBASSADOR CLG LIB
300 W GREEN ST CA 91123
PASADENA



ARBEIT MACHT FREI

JM

Marlboro Lights



The spirit of Marlboro
in a low tar cigarette.



Also available in King Size Flip-Top box.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

11 mg "tar," 0.8 mg nicotine av. per cigarette, FTC Report Mar'81

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

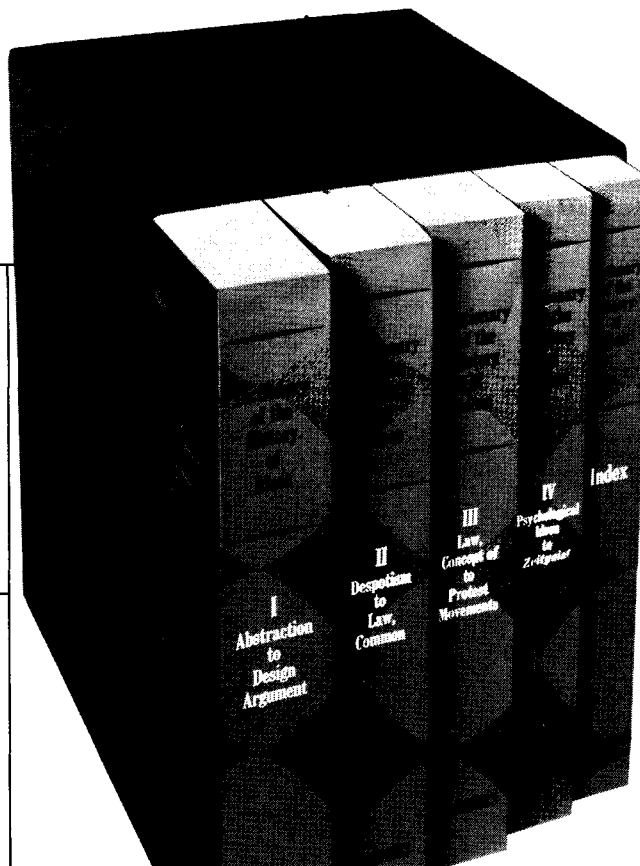
QPB MAKES HISTORY

The 5-volume hardcover edition costs \$255—and is worth every penny. Now QPB offers you every word, in soft-cover, for just \$12.95. And you have no obligation to buy another book.

The *Dictionary of the History of Ideas* is a liberal education—for thousands of dollars less than the cost of a college degree.

Though scholarly and authoritative, the articles are clearly written and free of jargon. Every article is cross-referenced so you can follow an idea as it has developed through the centuries, and from one country to another.

If you enjoy ideas you'll enjoy being a member of QPB, because QPB offers important works of fiction and nonfiction, from such classic and current authors as Eudora Welty, Woody Allen and Mark Twain. QPB books are soft-cover editions in hard-cover sizes, durably bound and printed on fine paper. But they cost up to 65% less than their hardcover counterparts. (You don't judge a book by its cover, so why pay for the cover?)



Join QPB, and save more than \$240 off the hardcover price for the monumental *Dictionary of the History of Ideas*

311 articles by 254 respected scholars on the pivotal ideas of Western thought

Boxed set of 5 volumes includes separate index volume—each volume 9"x7¼"

Cross-references and bibliography follow each article

Let's try each other for 6 months.

Quality Paperback Book Club, Inc., Middletown, Pa. 17057
Please enroll me in QPB and send me the 5-volume *DICTIONARY OF THE HISTORY OF IDEAS*, billing me only \$12.95 for the entire set (publisher's prices total \$255), plus shipping and handling charges. I understand that I am not required to buy another book. You will send me *QPB Review* (if my account is in good standing) for 6 months. If I have not bought and paid for at least 1 book in every six-month period you may cancel my membership. A shipping and handling charge is added to each shipment.

Name _____ (Please print clearly) 1-07 QB8-9

Address _____ Apt. _____

City _____ State _____ Zip _____

How membership works.

1. You receive **QPB Review** 15 times each year (about every 3½ weeks). Each issue reviews a new **Main Selection**, plus scores of Alternates. All Main Selections with established publisher's prices are offered at at least 20% discount off that price.
2. If you want the **Main Selection** do nothing. It will be shipped to you automatically. If you want one or more Alternate books—or no book at all—indicate your decision on the reply form always enclosed and return it by the date specified.
3. **Bonus books for Bonus**

- Points.** For each book or set you take (except the 5-volume *History of Ideas*), you earn Bonus Points which entitle you to choose any of the books we offer; you pay only shipping and handling charges.
- 4. Return privilege.** If *QPB Review* is delayed and you receive the **Main Selection** without having had 10 days to notify us, you may return it for credit at our expense.
- 5. Cancellations.** You may cancel membership at any time by notifying QPB. We may cancel your membership if you elect not to buy and pay for at least one book in every six-month period.

QPB The first book club for smart people who aren't rich.

Crooks and Clowns on TV

See the dastard. Hiss at him. See the dolt. Hoot at him. They're both businessmen, TV variety.

In the skimpy fare served up as network entertainment night after night, the business world is peopled mostly by ne'er-dowells and nincompoops. Likely as not, businessmen and women are portrayed on the tube as schemers and lawbreakers, a la J.R. Ewing, or else they're bubbleheads bumbling about and mouthing off for laughs, in the manner of Archie Bunker.

Such are the key gleanings of a study, first of its kind ever done, looking into the way television depicts people in business. The study found that two out of every three businessmen on television come across as foolish, greedy, or evil. In the prime-time view, over half of all corporate chiefs commit illegal acts, ranging from fraud to murder. Some 45% of all business activities are shown as illicit. Only 3% of TV business people behave in ways that are socially and economically productive.

The study, titled *Crooks, Conmen and Clowns: Businessmen in TV Entertainment*, was done by The Media Institute, a Washington-based research organization that seeks to improve the level and quality of media coverage of business and economic affairs. If the institute's researchers wound up their work bug-eyed and babbling, that's understandable. They peered at 200 episodes of the top 50 series on ABC, CBS, and NBC: sitcoms, shoot-'em-ups, dramas, and the like. The sample excluded all specials, sporting events, and news programs.

Analyzing the shows' content and characters, the institute confirmed what some of us in business have long been squirming about: As pictured by the floppy-

necked quiche nibblers who dream up network series, most businessmen are either blackguards or buffoons. "Businessmen on prime-time television are consistently shown in an unflattering light," The Media Institute said. "Sixty-seven percent are portrayed in a negative manner—as criminals, fools, or greedy or malevolent egotists—while only 25% are shown in a positive light."

The bigger the business, the more unfavorably its practitioners are painted. The leaders of large companies tend to be cast as out-and-out crooks, lesser executives as mere miscreants, and small businessmen as dimwits. In TV's vision of business, ethics are about as rare as rowboats in the Sahara.

Why the perverse portrayals? Leonard J. Theberge, president of The Media Institute, points out that TV entertainment adheres to a simplistic format of good versus bad. In years past, "bad" was personified by such societal stereotypes as minorities, ethnic groups, and women. Happily, such stereotypes have all but been eliminated. Still, the bad-guy slot remains to be filled. Business folks, it seems, make suitably handy villains and knuckleheads.

Theberge notes, too, the existence of "cultural reasons which might explain a bias by TV writers against businessmen. For example, it is not a new phenomenon for creative artists to look down on the commercial sector."

Two ironies obtrude. One is that the networks whose shows project businessmen as scoundrels and jesters are themselves commercial enterprises run by, yes, businessmen. The other is that the programs denigrating business are supported by advertising dollars from—you guessed it—business.



THE Atlantic

Reports & Comment

- 9 WASHINGTON: THE RETURN OF THE ABM FRED KAPLAN
18 RESOURCES: OIL, FISH, AND GEORGES BANK WILLIAM MACLEISH
-

- 23 CATHEDRAL RAYMOND CARVER
A short story

- 25 KNEELING DOWN TO LOOK INTO A CULVERT ROBERT BLY
A poem

- 30 THE KINGDOM OF AUSCHWITZ OTTO FRIEDRICH
A world unlike any other

- 61 THE PROPHET'S HAIR SALMAN RUSHDIE
A short story

- 67 THE VOTER EDWARD SOREL
A drawing

- 68 THE FIGHT TO SAVE BIG SUR ANTHONY BRANDT
Tourists and settlers in paradise

- 78 YOUNG POETS

DAME ALYS KATHLEEN ATKINS

VERMEER MARK IRWIN

TREES THAT PASS US IN OUR CARS WESLEY MCNAIR

TARANTELLA JANET MACFADYEN

NIGHTS IN KÜSTENJA JIM MERROW

PRODIGY LYNNE MCMAHON

- 81 LIST OF FUNNY NAMES RELEASED IAN FRAZIER

- 82 MUSIC/THE TRUE BIOGRAPHY OF MARIA CALLAS LLOYD SCHWARTZ
The story is in her recordings

- 87 THEATER/ROYALLY NICKED JAMES WOLCOTT
An 8½-hour production from London

- 89 BALLET/MOVING PICTURES HOLLY BRUBACH
Painterly choreography

- 92 SHORT REVIEWS PHOEBE-LOU ADAMS
-

- 4 LETTERS TO THE EDITOR

- 94 THE ATLANTIC PUZZLER EMILY COX & HENRY RATHVON

Cover illustration by James Marsh

VOLUME 248 No. 3
SEPTEMBER 1981



Subscriptions: 1 Year \$18.00,
2 Years \$33.00, 3 Years \$45.00
in the United States, its
possessions, and Canada;
\$2.00 additional, per year,
elsewhere. Address all
subscription
correspondence to
Atlantic Subscription
Processing Center,
Box 2547,
Boulder, Colorado 80322

Advertising:
Harper-Atlantic Sales, Inc.,
420 Lexington Ave.,
New York, N.Y. 10017.
Tel: 212-687-2424
Other offices in Boston,
Philadelphia, Chicago, Detroit,
San Francisco, Los Angeles.
The Atlantic, September 1981
Vol. 248, No. 3

Published monthly by
the Atlantic Monthly Company,
8 Arlington St., Boston, Mass.
02116.

Controlled circulation
postage paid at
Boston, Mass., Concord, N.H.,
and Boulder, Col.
Postage paid at Montreal,
port payé à Montréal.
Printed in the U.S.A.
Copyright © 1981, by
The Atlantic Monthly Company
(ISSN 0276-9077).

All rights reserved.
Unsolicited manuscripts
will be returned *only*
if accompanied by a return
envelope and adequate postage.

Postmaster:
Please send Form 3579
to The Atlantic, Box 2546,
Boulder, Colorado 80322.

THE Atlantic

Editor
WILLIAM WHITWORTH

Executive Editor
RICHARD TODD

Senior Editor
C. MICHAEL CURTIS

Managing Editor
LOUISE DESAULNIERS

Art Director
JUDY GARLAN

Washington Editor
JAMES FALLOW

Associate Editors
JAMES ATLAS
CORBY KUMMER
DEBORAH MCGILL
MARTHA SPAULDING

Staff Editors
PHOEBE-LOU ADAMS
PETER DAVISON (poetry)
ALISON HUMES
ANNE MORTIMER-MADDOX
SUE PARILLA

Assistants to the Editors
MARGARET AYER
MAUREEN BROWN
AVRIL CORNEL
RHODA GUBERNICK

Contributing Editors
BENJAMIN DEMOTT, WARD JUST
JAMES ALAN MCPHERSON
ROSS TERRILL, SANFORD J. UNGAR
DAN WAKEFIELD, ANDREW WARD
DANIEL YERGIN

Editor Emeritus
EDWARD WEEKS



President and Publisher
BRUCE GRAY

Vice President, Finance
LAWRENCE MURPHY

Circulation Director
ROY M. GREEN

Circulation Manager
SYDNEY LEONARD

Production Manager
JOSEPH T. O'CONNELL

Classified Advertising
MICHAEL P. TRACY

Editorial and Business Office
The Atlantic Monthly Company
8 Arlington Street
Boston, Massachusetts 02116

Chairman
MORTIMER B. ZUCKERMAN

LETTERS TO THE EDITOR

INACCESSIBLE CRITICISM

John Simon's review of Denis Donoghue's *Ferocious Alphabets* (July *Atlantic*) is a narrow-minded attack, the predictability of which does not excuse its argument. Mr. Simon's article is not a review; he is far too busy lambasting current criticism to consider Donoghue's use of conversation as a model of communication, or to find the author's place among the critics he writes about. Instead, Mr. Simon takes on those critics himself, and with little success. He charges them with obscurantism and with a fundamental irrelevance. He uses quotations to prove the first point, but simply shows that he is either unwilling or incapable of apprehending technical vocabulary. If Mr. Simon does not know what metaphor and metalepsis are, that is too bad—but that is not Mr. Bloom's problem. Nor is it very persuasive for Mr. Simon to claim that technical, rhetorical terms and complex language do not belong in criticism. To accuse the critics of a stylistic departure from the traditional models they are trying to change is to miss the point entirely.

Having balked at new language, Mr. Simon cannot begin to understand new thought. Instead of considering the consequences of New Criticism and the current offerings, of evaluating the theoretical implications and practical difficulties of both, Mr. Simon rejects the work of practicing critics before he understands it. He has met neither the critics' challenge nor his readers' expectations.

ADRIENNE Y. DONALD
Brooklyn, N.Y.

There is some truth in John Simon's description of recent critics (Barthes, Derrida, and Bloom) as opaque, cryptic, mystifying, and "obscurantist," as there usually is in received opinion. But a more open-minded and adventurous critic might have gone further and asked why this new criticism, particularly "deconstruction," should have such a profound effect on critics and teachers during the past decade. If John Simon had done so, he

might have found that many of us have tried to penetrate the opacity and mystification of these critics because deconstruction does have something to say to the common reader.

To talk about a deferred meaning that is never reached, or about a negative moment, is to talk about the confusion and obscurity we all encounter when we read a difficult poem or story. What deconstructive critics have enabled us to see is that this obscurity is not merely an obstacle that must be removed by the "correct" interpretation but something that should be part of even the most sophisticated response. Thus, when I use Derrida's concept of *différance* in my undergraduate classes, I am trying not to mystify my students but to reassure them that the confusion they experience when reading Faulkner or T. S. Eliot or Shakespeare is caused not by their obtuseness (or by the writer's willfulness) but by the nature of literary language to resist clear, unambiguous meanings.

I cannot honestly say that the common reader would gain much by plunging into the works of these critics. Simon is right about their obscurity. But he should see that these critics are, in their own ways, trying to answer the questions that all of us encounter when we try to figure out just what kind of meaning we get, or are supposed to get, when we read a novel or a poem.

LAWRENCE W. HYMAN
Brooklyn, N.Y.

ARE RAW MATERIALS FINITE?

Julian L. Simon's "The Scarcity of Raw Materials" (June *Atlantic*) admirably demonstrates that recent estimates of supply, and forecasts of "shortages," in natural resources have relied upon the extent of exploration, which itself responds primarily to prices. In adopting resource price and production-cost trends as indicators of non-scarcity, however, Simon fails to account for the myriad other causes of falling costs and prices, particularly for key fuel resources: standardization and commercialization of extraction tech-

10 good reasons to buy a Smith-Corona.

(No other electric portable has them.)

When you buy a Smith-Corona® cartridge electric portable, you get a lot more than a typewriter. You get a *total typing system*.

That's because our unique cartridge ribbon system lets you change from fabric to clean, crisp film (like the expensive office machines have) in a snap—literally. And your typing always looks just right, no matter what.

Best of all, there are two different ways of correcting. And both of them are easy, quick and effective. There's our new Lift-Rite™ correction cartridge, which works with its own companion film ribbon. It actually *lifts* mistakes right off the page! Which means you can type more neatly than ever before—and on any color paper. And our Re-Rite® cartridge covers mistakes with a thin white impression.

How Smith-Corona corrections are different (and better).

Now, it's true that other electric portables have correction systems. But none of them work like the Smith-Corona system does. For one thing, no other portable has a cartridge that snaps in and lifts off mistakes.

For another thing, the Smith-Corona correction system lets you erase whole words, sentences, even paragraphs without the time-consuming single correction backspacing you have to do with many other portables and even some office typewriters.

And with Smith-Corona correction cartridges—unlike some other correction ribbons—you don't ever type over

a spot that has already been used. Or have to fumble around to find an unused spot. And they never flake. Never. Or fail to correct the mistake. (We don't believe in corrections that are as sloppy as mistakes.)

The typewriter at the center of the system.

When you buy a Smith-Corona cartridge electric portable, you're buying a typewriter that's built to last. It's still made to the same exacting quality control standards that have made Smith-Corona a household word for "typewriter."

Smith-Corona typing *looks* the way typing should look. Crisp, clean, straight-as-a-die, and absolutely even. And Smith-Corona has more authorized typewriter service centers than anyone else in America—just in case something ever does go wrong. (And we might add, a Smith-Corona electric portable comes with a carrying case worthy of the machine it carries.)

So there are really ten good reasons to buy a Smith-Corona. Nine unique cartridges, and a typewriter built to give you years of dependable use. Which is something no other electric portable in the world can give you.

Smith-Corona. Makes your words (and your mistakes) sing. (Like no other portable.)



1. Lift-Rite correction cartridge.
Lifts mistakes right off the page.

2. Lift-Rite black film
cartridge. The companion
film for Lift-Rite correction.

3. Re-Rite correction cartridge.
It works with cartridges 4-9.

4. Black film cartridge.
Like the professionals use.

5. Color film cartridge. Red.

6. Color film cartridge.
Brown.

7. Color film cartridge.
Blue.

8. Color film cartridge. Green.

10. The Smith-Corona electric portable.
The center of the system.

Smith-Corona

nology, massive federal subsidies, and so on.

If the real cost to society of resource extraction is at issue, further, it should be noted that the "external cost" of this extraction—in the form of deteriorating health and renewable resources—has been no more fully accounted for than has the extent of the earth's resources.

BILL CARTER
Austin, Tex.

Julian Simon's article is flawed by his insistence on writing around the incontrovertible fact that natural resources are finite. That they may not be as scarce as is generally believed is very much beside the point.

M. E. TRAVAGLINI
New Carrollton, Md.

Julian Simon's refreshingly optimistic message concerning future fuel supply does not altogether inspire belief. I agree that current oil prices tell us nothing about the total amount of oil obtainable. But I strongly disagree with Mr. Simon's implication from this that the global petroleum supply crisis is ephemeral.

The current glut of oil inventories is related to short-term variables that Mr. Simon emphasizes but are altogether unrelated to the total amount of oil available to be discovered. It is true that our proven reserves of oil are only a current inventory and not a measure of our total reserves, but it is also true that the maximum total U.S. and global reserves of conventional oil yet to be discovered are known within broad limits on the basis of geological constraints. The historical increase in world oil consumption rate would essentially exhaust this resource within the next few decades.

Mr. Simon's statement that "the proven reserves of coal in the U.S. are enough to supply a level of use far higher than at present for hundreds or thousands of years" is an unfortunate error. U.S. proven reserves of coal are slightly more than a 200-year supply at the current consumption rate. For "a level of use far higher than at present," these reserves will last far less than 200 years.

Mr. Simon's emphasis on human ingenuity and imagination as a limitless resource is inspiring, but it is dangerous to imply that spartan fuel conserva-

tion is unnecessary and to assure people of continued high standards of living to be afforded by as-yet-nonexistent technology. Our technology is in large part fueled by oil and cannot serve us adequately during severe oil shortage. More specifically, our agricultural industry, the source of gigantic increases in food production that have permitted a doubling of world population since 1945, runs on oil—not on human imagination. Oil is a very finite resource, and Mr. Simon does not identify the economical substitute for it that is necessary to his view of a rosy future.

CRAIG BOND HATFIELD
Toledo, Ohio

Professor Simon's article leaves the misleading, and perhaps dangerous, implication that we shouldn't be worried about our energy situation since, in the long run, technology and the inevitable breakup of OPEC will lead us back to plentiful, cheap energy.

A similar thesis was widely proposed after the 1973-1974 oil embargo and price escalation. Since then, crude-oil prices have tripled again, and we have experienced long gasoline lines for the second time.

The dismissal of our oil and energy problem as the work of a cartel is a little facile. Strictly speaking, OPEC isn't a cartel. Despite Professor Simon's assertion, OPEC has never set production quotas, an essential attribute of a full-fledged cartel. (Incidentally, it was an Arab oil embargo in 1973-1974, not an OPEC embargo, as stated in the article.)

I think it would be unwise to assume that OPEC will not continue to be a viable organization. In my view, the reason OPEC has been successful is that the 1973 disruption of oil supplies in the Middle East followed close on the heels of the disappearance of surplus U.S. crude oil producing capacity. There were oil cutoffs due to Middle East conflicts in 1956 and 1967, but an oil crisis didn't develop because the U.S. stepped up production to offset the drop in Middle East supplies.

FRANK YOUNG
Stamford, Conn.

Julian Simon replies:

Mr. Travaglini (and others) assert that my position is unsound because of "the incontrovertible fact that natural resources are finite." I argue that the

term "finite" is not only inappropriate but is downright misleading in the context of natural resources, from both the practical and the philosophical points of view.

A useful definition of resources quantity must tell us how to calculate the quantity of the resource that might be available in the future. But the future quantities of a natural resource such as copper cannot be calculated even in principle, because of new lodes, new methods of mining copper, and variations in grades of copper lodes; because copper can be made from other metals (though this is hardly practical now); and because of the vagueness of the boundaries within which copper might be found—including the sea, and other planets. Even less possible is a reasonable calculation of future copper needs, because of recycling and because of the substitution of other materials for copper, as in the case of a single communications satellite, which replaces thousands of tons of copper in intercontinental telephone wires.

With respect to energy, it is particularly obvious that the earth is not our only resource; our sun is our basic source of energy in the long run, from vegetation (including fossilized vegetation) as well as from solar energy. As to the practical finiteness and scarcity of resources—that brings us back to cost and price, as I argue in the article, and by these measures history shows progressively decreasing rather than increasing scarcity.

Concerning U.S. coal reserves and my estimate, which Mr. Hatfield says is in error: M. King Hubbert, perhaps the best-known expert on fossil fuel reserves, as summarized by Jerrold Kurz in the 1980 book *Energy*, asserts: "U.S. reserves, based on the present consumption rate, are sufficient for 700 years. Even if all fossil fuel energy inputs were derived from coal, our remaining reserves would still last approximately 135 years—or 560 years if coal to a depth of 6,000 feet is utilized."

I agree with Mr. Young that we must worry about our dependence on foreign oil. I certainly do not counsel complacency about energy in general, or oil in particular, for these reasons: First, there are political and strategic aspects of oil supply that are not present with such materials as copper and wheat. We face a bargaining entity in OPEC that has raised prices far above the cost of

Do you have room in your home for three wise men? They are Plato, Aristotle, and Marcus Aurelius...three of the wisest, wittiest, most stimulating minds that ever lived.

They still live...in the Five Great Dialogues of Plato, the Meditations of Marcus Aurelius, and Aristotle's On Man in the Universe.

All three books (regularly \$25.47) can be yours for only \$1.00 as your introduction to the Classics Club.

The Classics Club is quite unlike any other book club.

The Club doesn't offer best sellers that come and go. Instead, it offers its members a chance to stay young through great books that will never grow old. These books include Utopia by Thomas More; the works of Shakespeare; Benja-

min Franklin's Autobiography; Omar Khayyam's Rubaiyat; Walden by Thoreau; and other fresh, spontaneous, even outspoken works that stretch your mind and sweep away the mental cobwebs that hold back most men.

You never have to buy any of these books. (To force you to buy a classic would be barbaric.) As a member, take only those books you really want to own. And, at any time, you may cancel your membership, without penalty or hurt feelings.

The selections themselves are remarkable values. They're carefully printed on expensive paper stock. They're hard-bound in matched wheat-colored buckram, worked and stamped in the colors of crimson, black and gold. And through direct-to-the-public distri-

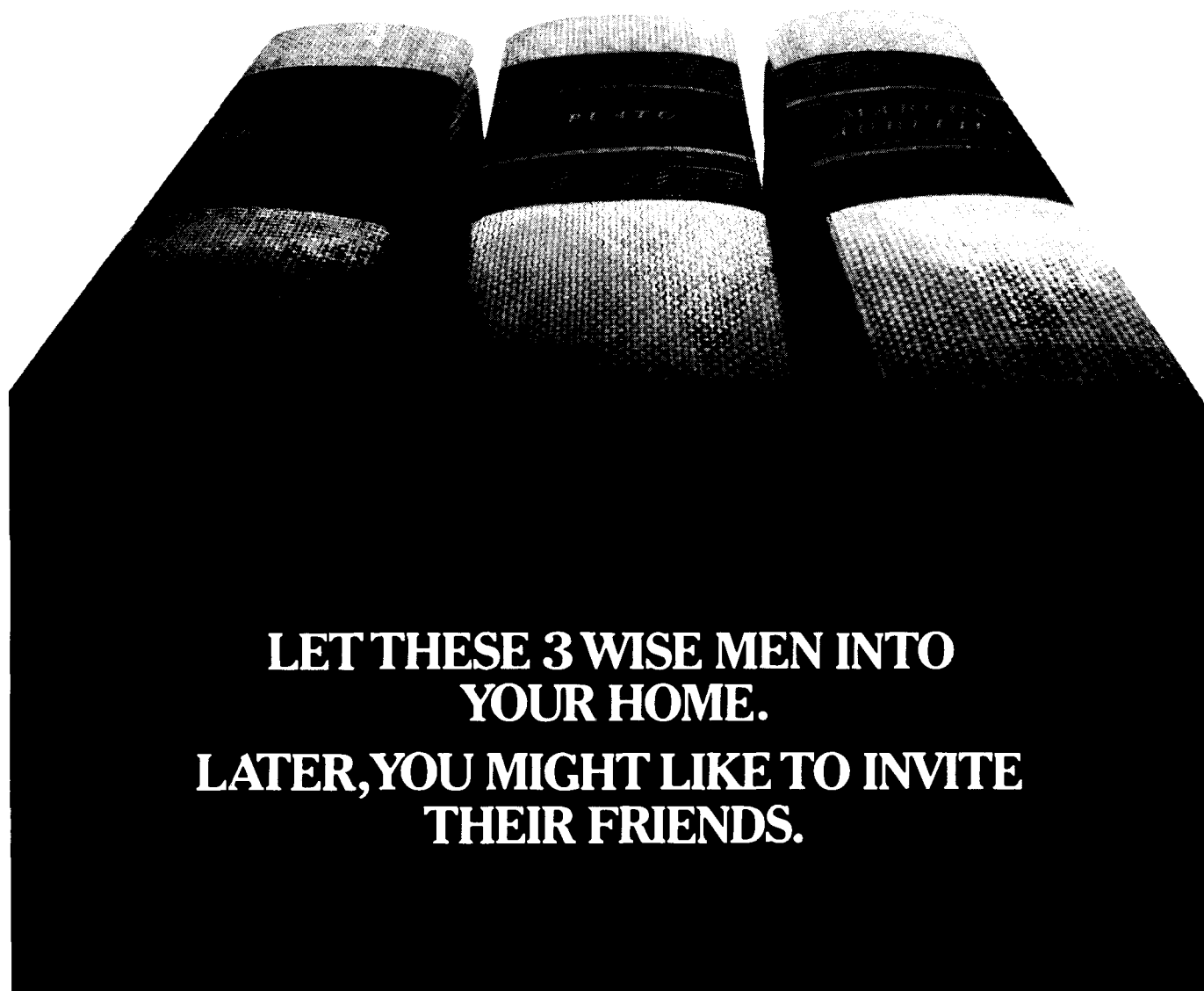
bution, we are able to offer to our members these deluxe editions for only \$8.49 each, plus shipping.

Interested? We'll send you the first three selections, Plato, Aristotle and Marcus Aurelius — all three for only \$1.00 plus shipping.

We know what charmers these three wise men are. We're betting that you'll be so taken by them that you'll want to stay in the Club and meet some of their friends, including the greatest story tellers, philosophers, poets, and historians the world has ever known.

Don't send any money now. We'll bill you later. Just fill in the coupon below, now, while you're thinking about it and while the invitation still stands.

Mail coupon to The Classics Club, Roslyn, New York 11576.



**LET THESE 3 WISE MEN INTO
YOUR HOME.
LATER, YOU MIGHT LIKE TO INVITE
THEIR FRIENDS.**

THE CLASSICS CLUB ROSLYN, N.Y. 11576

Please enroll me as a member and send me at once Plato, Aristotle and Marcus Aurelius. I enclose *no money now*. After a week's examination, I will either keep my books and pay \$1 (plus shipping) or return them. As a new member, I will get a complete list of titles from which to select the books I want. For

each volume I choose, I pay only \$8.49 (plus shipping). I may return any book, for full credit within 21 days and I may cancel my membership at any time. Note: Members accepted in U.S.A. and Canada only. Offer slightly different in Canada.

MR./MRS./MS. _____ (PLEASE PRINT) C02D4M
ADDRESS _____
CITY _____
STATE _____ ZIP _____ 1-TP

Treat yourself to our famous Corncob Smoked Ham from VERMONT



... and we'll treat YOU to a
FREE package of Bacon!

We smoke our Hams and Bacon over slow fires of corn cob and maplewood, the way we've been doing it here in Vermont for over 100 years. Folks everywhere agree the mouthwatering flavor is simply beyond compare — so much better than hickory-smoked!

To convince you, we'll send you a 6 lb. corn-smoked Half Ham (serves 6 to 8) at our one-to-a-customer introductory price of just \$21.95 post-age-paid anywhere in continental U.S.

Order now, and we'll include 12 oz. of our corn-smoked Bacon — FREE! Satisfaction guaranteed or full refund without quibble. Mail coupon or call us today!

To order, send check or VISA, Mastercard or American Express account number and expiration date to address below. Or call 802-434-3411. Ask for #8575 HALF HAM, only \$21.95. Offer expires November 30, 1981.

HARRINGTON'S

0209-1 Main St., Richmond, VT 05477



**American
Diabetes
Association**

On the best beach in BARBADOS



Fashionable St. James — the beach. And directly on it, the impeccable Colony Club. Small, chic, with the easy style of Indies living. All rooms have patios looking out on verandahs and gardens. The best in dining with buffets, barbecues, patio dancing. Yachts for cruises and parties. Glass bottomed boats, fishing boats. Pool. 7 miles from Bridgetown's duty-free shops.

4 Days/ \$189.50 \$212 (T8EA1CDT1
3 Nights to per person, dbl. occ.
Apr. 16, Dec. 15, 1981)

Includes: air-conditioned room, breakfast and dinner, exchange dining and entertainment at other nearby luxury resorts, rum punch party, tennis, lunch or cocktail cruise and airport transfers.

**COLONY
CLUB**

See your Travel Agent or call
David B. Mitchell & Co., Inc.
777 Third Ave., NYC 10017
Phone: (212) 371-1323
Toronto & Montreal: ZEnith 3-2030

production. And the possibility of an oil embargo is an event that our society ought to be willing to make special efforts to avoid. Second, even though oil has been deregulated, the federal government still intervenes heavily in the energy business through regulation of nuclear power, natural gas, and other energy sources. Hence, there is no likelihood of getting the true free-market outcome for energy in the near future even if a maximum of benign neglect were applied.

For these reasons I support a large strategic oil reserve, as well as social investments in research that will promote development of the best prospects for oil replacement, including (but not limited to) shale oil and coal. And I probably would support an import tax on foreign oil, because—according to Hendrik Houthakker's persuasive analysis—that is a most efficient way to reduce our consumption of foreign oil, improve our bargaining power with respect to OPEC, and increase profit incentives for domestic energy producers.

CORRECTIONS, OMISSIONS

In "The New Economic Faith" (April *Atlantic*), Robert Zevin expresses his belief that large corporations "have done rather poorly" during the inflation of the 1970s and "that relatively small companies have been strong winners."

I would like to correct these mistakes by reference to the facts. From 1963-1976, the contribution of small business (less than 500 employees) to gross national product dropped by 4 percentage points—from 43 percent to 39 percent. In particular, the sales transfers were from companies with fewer than twenty employees to those with more than 500 employees. Of course, as Zevin says, there are always some small "winners" in the high-technology field. But let's not generalize from a few cases to the whole country. The nation's small businesses are fighting for a smaller portion of the GNP pie.

BRUCE D. PHILLIPS
Small Business Administration
Washington, D.C.

text of my essay which appeared in the June issue of *Atlantic* under the title "A Plan for Controlling Inflation." I would like to right a few of the larger distortions.

In the second paragraph, I am represented as saying, "wars produced enormous inflation for millennia before it could have had Keynesian motivation. . . ." My intent was to say that wars occurred and produced inflation long before they could have had Keynesian motivation. Inflation is an unwanted by-product of Keynesianism, not a conscious objective.

A half-dozen paragraphs later, the following occurs: "It is of course a corollary of administration policy that while allowing the Keynesian state to wither away we will encourage the productive forces of the private sector to flourish." I hope other parts of the text make clear that in my view it is not the intention of administration policy to encourage "the Keynesian state to wither away." Rather, the administration seeks to prune away perceived welfare-state superfluities while preserving the essence of Keynesianism. Likewise, supply-side economics is hardly a "corollary of administration policy" but a prime postulate on its own.

Two pages later there is a sentence which should read: "Whatever the administration does to enlarge the *warfare* state will increase inflation," rather than "*welfare* state," as printed. Of course, enlarging the latter would also prove inflationary; however, such is clearly not the administration's intention.

These examples are representative of more numerous differences between my manuscript and the final printed words. As a last example, I reproduce my original concluding lines. The italicized words were either omitted or altered in the printed version.

"Since the *end of World War II* only a few fleeting and increasingly infrequent events have been able to overcome our narcissistic insularity and stimulate a sense of nation, of history and future, of communal cohesion. These are the unfamiliar *sentiments* which are needed to join us in a prolonged and planned effort to *safely* eliminate inflation. The object of such an effort is surely as worthy of ubiquitous support as any. The choice may still be ours."

ROBERT B. ZEVIN

There were a number of omissions and transformations in the printed



REPORTS & COMMENT

WASHINGTON

THE RETURN OF THE ABM

As enthusiasm for the ABM is revived, so are the arguments against it—and they are compelling



THE ABM, LONG presumed dead, is in fact alive and, if not entirely well, at least on the road to recovery. ABM stands for anti-ballistic missile—a missile that shoots down enemy missiles as they plunge toward nuclear-weapons sites, air bases, or cities. The U.S. has seen one major ABM debate, which began in 1968. Pro-ABM forces lost that round in 1972, when Richard Nixon and Leonid Brezhnev signed the ABM Treaty, as part of the SALT I arms-control agreement, which limited each side to two ABM sites of no more than 100 missiles each. A 1974 revision further reduced the number to one site each, and a year later—only months after its construction—the United States dismantled its site. The Soviets still maintain one site near Moscow, but with only sixty-four missiles.

What most people forget is that in 1969, at the height of the debate preceding the treaty, the ABM was approved by the U.S. Senate—in a 50-50 tie vote, with the deciding ballot cast by Vice President Spiro Agnew—and again in 1970, by a 52-47 margin. These votes came at a time when anti-defense sentiment was strong, when talk of a Soviet strategic threat was not taken seriously in most quarters, and when the Senate had such eloquent voices for arms con-

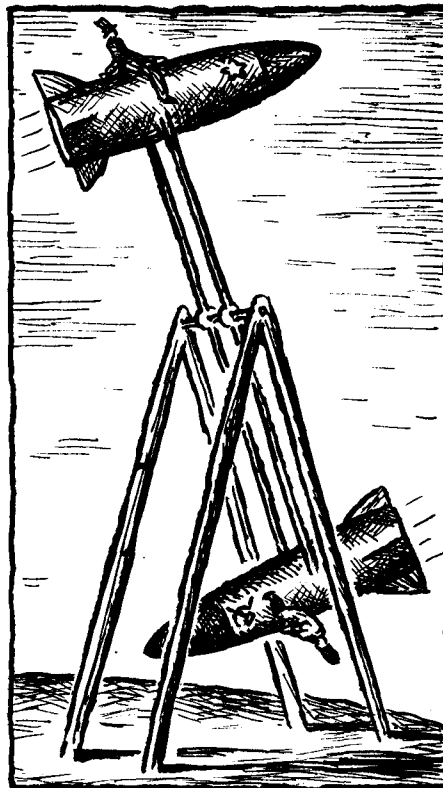
trol as those of J. William Fulbright, Philip Hart, Stuart Symington, John Sherman Cooper, Ed Brooke, and others who have since retired or gone down to electoral defeat. It's a very different Senate, and public, today. And today, the ABM is making a comeback. This time, the Defense Department claims, the situation is different in another way as well. This ABM, they say, will work.

Advocates offer the following rationale for the new ABM. In the next few years, Soviet missiles will be sufficiently accurate to destroy 90 percent of the 1,000 U.S. land-based Minuteman intercontinental ballistic missiles (ICBMs)

in a nuclear first strike. In response, the Pentagon plans to build a new ICBM, the MX, housed in a "multiple-shelter" scheme across sparsely populated areas of the Southwest. Twenty-three shelters will be constructed for each of the 200 MX missiles. Each missile will be randomly moved about from one shelter to another in canisters mounted on trucks. The idea is that the Soviets won't know which shelter holds the real missile; in order to launch a first strike that devastates the American ICBM force, they would have to fire one warhead at each shelter. Two hundred missiles with twenty-three shelters each makes 4,600 targets, requiring the Soviets to fire at least as many warheads.

By late 1979, many officials began to recognize a major problem with the multiple-shelter scheme: the Soviets could easily field 4,600 warheads theoretically capable of destroying all 4,600 shelters. This buildup seemed virtually inevitable if, as appeared likely, the Senate did not ratify the SALT II arms-control treaty. A CIA "national intelligence estimate," released in January of 1980 and promptly leaked to the *Washington Post*, reported that without the constraints of SALT II, the Soviets could by the late 1980s have as many as 14,000 warheads on their ICBMs alone—more than enough to destroy the entire MX system, which itself is not scheduled to be fully deployed until at least 1989.

The Air Force could respond to this sort of Soviet expansion by building still more shelters per missile, but shelters are expensive and available land is scarce. For those who did not believe in moving land-based missiles to sea (i.e. for virtually the entire Air Force staff),



the ABM began to look attractive again. In testimony before the Senate Armed Services Committee in 1979, Major General Kelly Burke, Air Force director of operational requirements, said that the Soviets might build more warheads than the MX had shelters, and that "therefore we quickly came to the conclusion that the solution, and it seems to be a very happy one, is the marriage of our [MX multiple-shelter] system with the Army's ballistic missile defense system."

THE ABM PROGRAM is run by the Ballistic Missile Defense (BMD) Command of the U.S. Army, in Huntsville, Alabama. For the past eighteen months, life for the BMD Command has been rather like that of the State Department's Afghanistan desk after the Soviet invasion. The briefing books have been dusted off; contracts are being awarded at a brisk clip; and the budget for BMD, which had held steady for the past decade at an average of \$225 million a year for basic research and development, has started to soar. President Carter had begun to increase spending for ballistic-missile defense. Over the next five years, the Reagan Administration proposes to spend more than half a billion dollars beyond the Carter five-year plan. An ABM system that will theoretically protect the MX will require at least \$15 billion this decade and at least \$11 billion more during the next (in 1980 dollars). These figures are based on Army estimates of a new ABM's cost. Given traditional underestimates, cost-overruns, and inflation, the price will almost certainly end up at least three to five times as high. If the Pentagon decides to defend air bases or any of the 1,000 Minuteman ICBMs already in the arsenal, the price tag will shoot up several times higher.

This new ABM cannot be built and deployed, however, unless the 1972 ABM Treaty is substantially revised or scuttled. The treaty comes up for review in 1982, the same year that the BMD Command plans to conduct a dramatic test demonstrating that one missile can indeed shoot down another. The Pentagon official directing the review of the treaty is Richard Perle, former defense aide to Senator Henry Jackson and no advocate of arms control. The Defense Science Board, a panel of experts inclined to endorse sophisticated new weaponry, has been asked by De-

fense Secretary Caspar Weinberger to evaluate ABM defense of the MX. Weinberger has spoken enthusiastically of the ABM, as has President Reagan, and as did the 1980 Republican Party platform. The director of national security affairs at the Office of Management and Budget, a bureau that normally opposes huge spending projects, is William Schneider, who ten years ago, while he was at the Hudson Institute, supported the ABM and still does. No matter whether the Reagan Administration finally decides to put the MX missiles in multiple shelters or someplace else, interest in ABMs is likely to remain high. If relations between the superpowers worsen, if pressures for much higher defense spending continue, and if the Army's BMD test seems a success, there is a real chance that the United States will move to change or even scrap the ABM Treaty, widely viewed as the most noteworthy document signed in the relatively brief and uneventful history of U.S.-Soviet arms-control talks.

A common myth, especially prevalent among ABM advocates, is that the U.S. killed the ABM ten years ago because of a peculiar doctrine, invented by former Defense Secretary Robert McNamara, known as Mutual Assured Destruction, or MAD. The essence of MAD is that neither superpower would start a nuclear war knowing that its cities—its urban-industrial society—would be destroyed in a devastating retaliatory blow. Thus, leaving oneself vulnerable is a good thing; it allows the other side to retaliate effectively, and so deters would-be aggressors from engaging in first-strike adventurism. ABMs, therefore, weaken nuclear deterrence. ABM advocates claim today that Soviet leaders never believed in MAD, that they are going after America's deterrent forces, and that we must therefore dispense with this delusion called MAD and build ABMs.

This analysis, however, is bad history. McNamara publicly advocated MAD, especially in his later years at the Pentagon, but the real U.S. nuclear strategy—as reflected in actual targeting plans—emphasized destruction of Soviet military targets, not cities. More to the point, MAD had very little to do with the decision not to build a vast ABM force. The critical reason for not doing so was the discovery that the ABM would not work.

THE ABM HAS existed under various names and guises since the 1950s. More than \$10 billion has been spent, but nothing has ever got very far off the ground. The arguments against ABMs designed to defend American cities (as the earlier versions were), and against those that would protect ICBM silos (like the Safeguard, the object of the last great debate), have been roughly the same—and compelling. First, no matter how many interceptor missiles the United States launches, the Soviets could overwhelm them by attacking with larger numbers of offensive weapons. This became even clearer after the Soviets started to equip their missiles with multiple warheads in late 1974. Second, the ABM radar—a huge, ground-based dish that tracks incoming Soviet warheads and guides U.S. interceptors toward them—is highly vulnerable. Besides attacking the radar directly, the Soviets could explode a single high-yield nuclear weapon at an altitude of 60,000 to 100,000 feet, showering the skies with enormous amounts of charged ions that would blind—"black out"—the radar. The Soviets could immediately launch more warheads, which the ABM could not detect through the ion layer or, consequently, shoot down. Finally, the effort involved in tracking and shooting down thousands of warheads traveling at roughly fifteen times the speed of sound would more than swamp the capacity of computer systems available in the early 1970s; the data could not be processed in the few seconds that the ABM would have to knock out its targets.

The proponents of the new ABM claim that now, ten years later, all this has changed. Data-processing technology has advanced so remarkably that most of the information an ABM might need can be sorted very rapidly. Higher-frequency radars have been developed that are allegedly less vulnerable to blackout. Finally, when coupled with the multiple-shelter MX, the new ABM will give the side defending against a nuclear attack "leverage" over the offense.

This last is considered most important. Without the ABM, the Soviets would have to fire at least twenty-three warheads to hit one MX missile, or more than 4,600 warheads to get all 200. With the ABM, however, the Soviets would have to shoot at least two warheads at each shelter—forty-six per

The scientific-industrial revolution is on the threshold of developments from biology as momentous as any that have come from physics—all the way from the steam engine to the computer. For the new science of molecular biology has given rise to a new high technology...

GENETIC ENGINEERING

Under the title of **Industrial Microbiology**, the editors of **SCIENTIFIC AMERICAN** have devoted their entire September issue to this single topic.

In this issue, scientists and engineers actively engaged in the work present the full background necessary to common understanding of the new power to manipulate life processes that genetic engineering confers.

These authors review the origins of genetic engineering in the science of molecular biology and place in perspective the industrial application and prospective economic impact of this technology.

Hazards from this new technology must be reckoned with along with benefits. The engineering of life processes implies profound and troubling questions of ethics and value. For years to come, there will be no more authoritative or comprehensive picture of Industrial Microbiology

between two covers than that presented in the September issue of **SCIENTIFIC AMERICAN**.

THE ARTICLES

- Industrial Microbiology
- Industrial Microorganisms
- The Genetic Programming of Industrial Microorganisms
- The Microbiological Production of Food and Drink
- The Microbiological Production of Pharmaceuticals
- The Microbiological Production of Industrial Chemicals
- Production Methods in Industrial Microbiology
- Microbiology in Agriculture

With this issue we continue a 32-year tradition of devoting each September issue to a single topic of current scientific and public interest. In the other monthly issues our readers enjoy a diversity of articles

covering the full range of disciplines.

All the major advances in science of the past three decades have been reported in our pages by the scientists who did the work. More than 65 Nobel laureates have written for **SCIENTIFIC AMERICAN**, nearly all of them before receiving the prize.

The collaboration of our editors in the preparation of text and illustration makes the work of our authors accessible to a steadily growing world-wide readership.

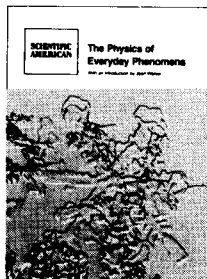
Why not join us at the frontiers of knowledge?

A one-year subscription is only \$21. A two-year subscription, at \$38, saves you \$4. And a three-year subscription, at \$52, saves \$11.

Send no money. We'll bill you.

SCIENTIFIC AMERICAN

WITH YOUR SUBSCRIPTION...



THIS FREE BOOK

As soon as your subscription payment is received, we will also send you *The Physics of Everyday Phenomena* (regular price: \$5.95), as your bonus. This new anthology offers many surprises about things of nature so common as to be ignored in the confusion of daily life, such as fog, raindrops, snow crystals, thunder, ocean waves. Example: How would you describe the shape of a falling raindrop?

SCIENTIFIC AMERICAN 415 Madison Avenue, Dept. PB, New York, N.Y. 10017

Yes, enter my subscription to the monthly issues of **SCIENTIFIC AMERICAN** for the term I have checked. As soon as my payment is received, you will also send me—absolutely free—the new anthology *The Physics of Everyday Phenomena* (regular price: \$5.95).

MY GUARANTEE

I may cancel my subscription to **SCIENTIFIC AMERICAN** at any time and receive a refund for the unused balance. The bonus book is mine to keep.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

PB

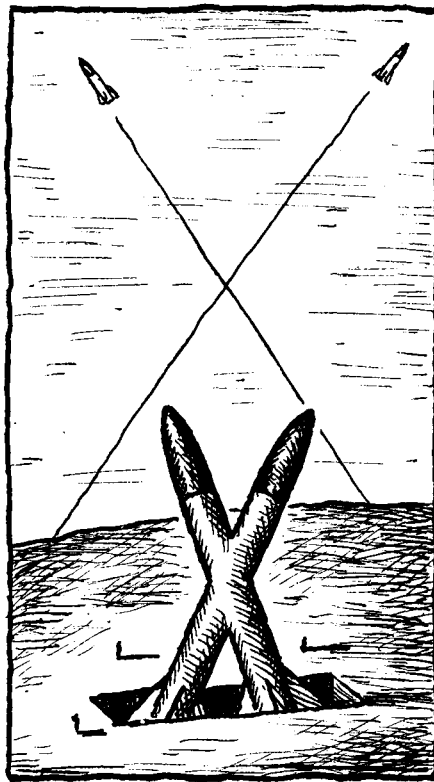
☐ Start my subscription with September issue. ☐ My payment is enclosed
☐ 1 year—\$21 ☐ 2 years—\$38 ☐ 3 years—\$52 (save \$4) (save \$11) ☐ Bill me

(Subscription rates outside U.S. and Canada
1 year—\$27 2 years—\$48 3 years—\$65)

MX, or more than 9,200 in all—because they would have to assume not only that any one of those twenty-three shelters might hold the MX but also that the MX is defended by an ABM that might destroy the first Soviet warhead. Thus, goes the rationale, adding the ABM is like doubling the number of shelters. The defensive task becomes simpler, as well: the ABM does not have to shoot down every warhead—only those aimed at the shelters containing the missile and the radar itself. (Warheads aimed at empty shelters will release nuclear fallout that only kills people.)

The new system is supposed to work this way. If the Soviets launch a nuclear attack, existing U.S. reconnaissance satellites detect the exhaust plumes fired from the rockets as they take off and instantly alert the North American Air Defense Command (NORAD) and the Strategic Air Command (SAC). The commander of SAC then launches an optical probe that flies in a very slow suborbital path in outer space. The probe looks out with long-wave infrared (heat-seeking) sensors mounted on a telescope, and tracks the Soviet ICBMs—hot objects in cold space—on their way over the North Pole, estimating the course of their flight path from lift-off to a mathematical extrapolation of where they will land. A ground-based battle-management computer monitors the probe and tells the ABMs what they need to know about the attack—how many warheads, how many decoys, their angles and precise destinations.

Meanwhile, within each MX complex of one missile and its twenty-three shelters, a combined radar-ABM package (which has been hidden away in a shelter and moved to others, just like the MX) pops out of its shelter, poised to meet the attack. Eventually, the ABM system will contain a two-layered defense, one for hitting targets outside the atmosphere (altitudes above 300,000 feet) and one for hitting warheads once they have entered the atmosphere (below 50,000 feet). Armed with the data relayed by the battle-management computer, the longer-range ABMs are launched, guided by their own computer and infrared sensors. They speed toward the points where the Soviet warheads are estimated to be in outer space and, like huge flying umbrellas, their unfolding spikes packed with non-nuclear explosives, hurl themselves



against arrays of targets, colliding with them or blowing them to shrapnel.

Some of the Soviet warheads will certainly get through this barrage. That's where the low-altitude layer, called LoADS (for Low-Altitude Defense System), takes over. Its radar peers up at the sky, seeking only those warheads aimed at targets it is programmed to defend. Aided by high-speed computers that estimate the location, velocity, and trajectory of those warheads, LoADS launches three shorter-range interceptors per MX complex—one to defend the missile, one to defend the radar, one to defend an adjoining shelter—in an attempt to destroy the warheads that have "leaked" through the top layer of defenses.

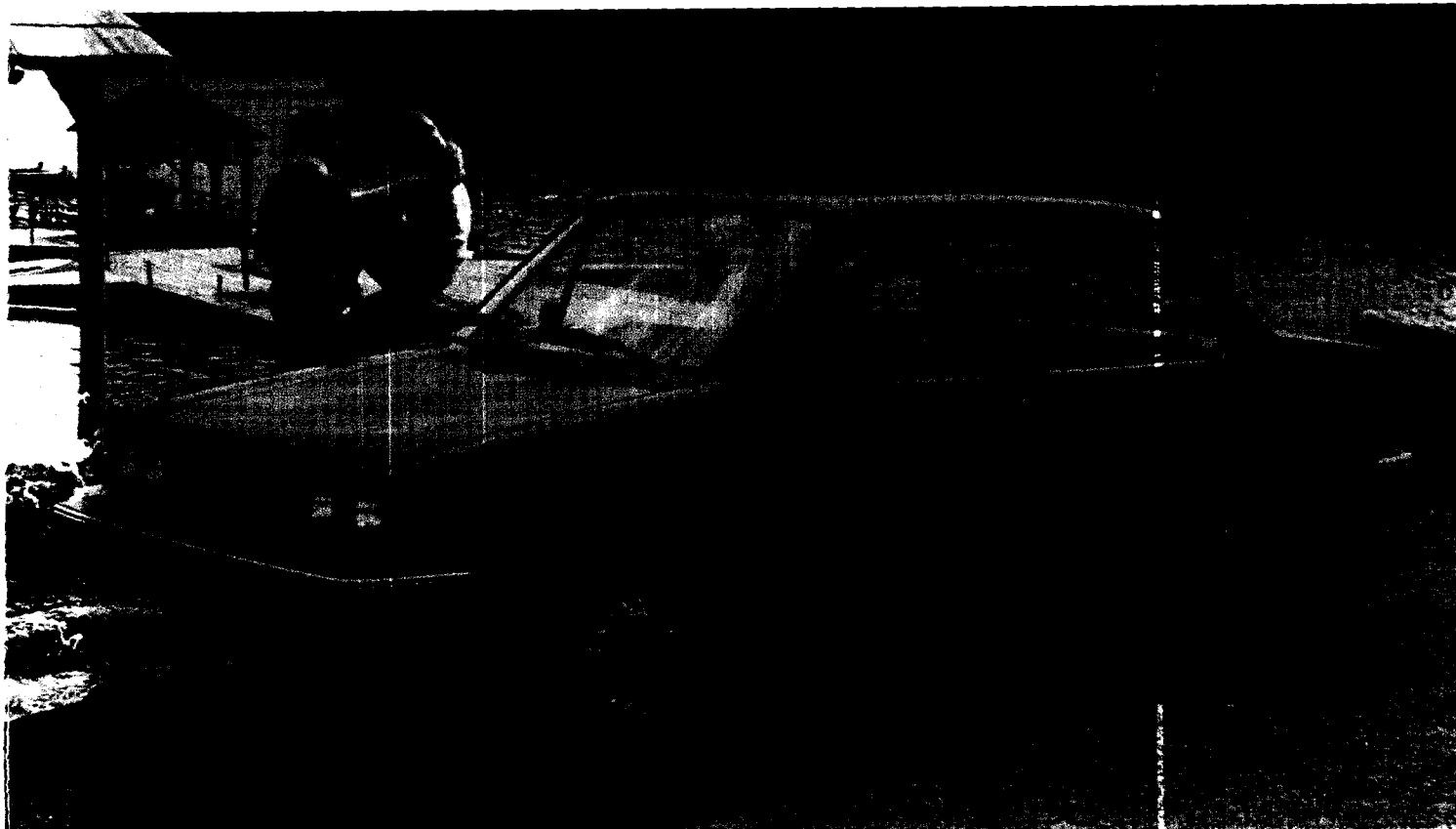
By the time this is over, BMD officials predict, the Soviets will have succeeded in destroying only 5 to 20 percent of the MX missiles, leaving the United States with a devastating retaliatory punch in its land-based force. And because the Russians will realize this, so the argument goes, they won't bother with a first strike, foreseeing the futility of their effort.

ALL THIS MAKES sense only if the new ABM works—and works when faced with actual nuclear explosions. Yet a close look at the technology reveals major uncertainties and short-

comings—the same sorts of flaws that prompted the cancellation of the ABM ten years ago. The low-altitude layer, LoADS, is the only part of the ABM system that could possibly be built and deployed by the end of the decade, for both budgetary and technical reasons. However, proponents say, LoADS alone would be enough to ensure the survival of the MX in a multiple-shelter scheme, because it forces the Soviets to shoot 9,200 warheads to destroy 200 missiles, which would represent an extremely uneconomical "cost-exchange ratio" for them to assume. In fact, those 9,200 warheads might be destroying as many as 2,000 American warheads (each MX has ten warheads), a less "costly" ratio. In any case, the Soviet military has never been known for economizing. More important, if the Soviets are determined to go after the U.S. land-based missile force, and if the CIA is correct in calculating that the Soviets could field 14,000 ICBM warheads by the end of the decade, then firing 9,200 warheads still leaves them with several thousand.

Furthermore, the Soviets might not have to use that many warheads to defeat or seriously cripple the ABM defense. One major problem is still the vulnerability of the radar—only one fifth the size of that on the old Safeguard ABM, but still powerful enough to be detected at great distance and thus susceptible to attack or disruption. The Soviets could deceive the radar, thereby destroying the whole system, in several ways. First, they could launch a small "precursor" attack designed to force the U.S. to raise the radars out of their underground shelters. Launching only twenty missiles might be enough. Those twenty could, combined, hold 200 warheads. U.S. commanders would have to assume that the Soviets had discovered which shelters hold the MX, in which case twenty missiles could constitute a devastating attack. Not to raise the radars in preparation to use the ABM, bought at great cost, would be unconscionable. After launching their missiles, the Soviets could see where the radars were located (perhaps using advanced reconnaissance satellites), transmit the information back to headquarters, saturate the radars with nuclear warheads, and then destroy the other, defenseless shelters.

At this point, the Soviets would not have to aim at all the other shelters to



INTRODUCING JETTA DIESEL: IT'S FOUR OF THE BEST MILEAGE CARS IN AMERICA.

Wait a minute.

How can we say that one car is four of the best mileage cars in America?

Easy.

Because the new Jetta Diesel is literally four Volkswagens in one.

When you fill it up, the Jetta Diesel's incredibly economical like our Rabbit Diesel, the best mileage car in America.

In fact, it gets an EPA estimated **41** mpg, 57 mpg highway estimate. (Use "estimated mpg" for comparisons. Your mileage may vary with weather, speed and trip length. Actual highway mileage will probably be less.)

When you load it up, the Jetta Diesel's spacious like our Dasher Diesel Wagon. With enough room and luxury so it won't cramp your style—or your passengers—on long trips.

And when you rev it up, the Jetta Diesel handles a lot like our sporty Convertible.

Because, despite its economical diesel engine, it is a lot like our Convert-

ible, thanks to its rack-and-pinion steering, front-wheel drive and 4-wheel independent suspension.

But perhaps the most impressive thing about the Jetta Diesel is that it's like a Jetta Diesel. Which means that it gives you sleek European styling, sophisticated German engineering and a trunk large enough to handle 8 suitcases.

So you see, having a Jetta Diesel really is like having four of the best mileage cars in America.

Except you only need one parking place.

ALL OUR BEST IDEAS IN ONE CAR. JETTA.



destroy each MX. According to current Army plans, the radar-ABM package will be in a shelter very close—if not next door—to that holding the MX. They must be close for two reasons: first, neither the radar nor the acceleration of the ABM is powerful enough to be situated very far from the object it must defend; second, the farther the radar sits from the missile, the wider the area of the sky it has to survey and hence the more difficulty it has in shooting down incoming warheads. Thus, the Soviet task could be quite simple: after destroying the radar, they could merely fire warheads at those shelters fairly close to the shelter holding the radar. Ironically, the existence of the ABM makes it several times *easier* for the Soviets to destroy the MX.

The Soviets do not now have the “real-time” reconnaissance satellites or communications necessary to pull off such an operation; relaying vital information and making adjustments to missile targeting now take hours instead of minutes. However, a defense aide in the House of Representatives, who is familiar with U.S. intelligence data and who supports the idea of ballistic-missile defense, says, “I wouldn’t want to bet that the Soviets couldn’t have something like that in ten or fifteen years. The Army’s system explicitly bets that they won’t.”

The Soviets could use methods much simpler than satellites. To appease residents of southwestern states, the Air Force has promised that only the very small area *immediately* surrounding each of the 4,600 MX shelters will be off limits. The roads, tracks, and valleys of the area nearby will be open to ranchers, campers, tourists—and Soviet spies. Agents or spies could surreptitiously implant passive (i.e., undetectable) devices on the ground that detect a variety of signals that might distinguish MX missiles from empty holes or from dummy missiles as they are trucked from one shelter to another in metal canisters. Many technical experts worry about a wide variety of ways in which the Soviets could discover the location of the MX and of an ABM radar unit. Some Pentagon officials consider this vulnerability so critical that they have anointed it with an acronym: PLU (rhymes with “pooh”), meaning “precision location uncertainty.” If the PLU problem cannot be solved, and some analysts believe it never can be,

then neither multiple shelters nor new ABMs make much sense.

Similarly, an unclassified digest of a secret General Accounting Office report of last November reads: “The projected [Soviet] threat, which the Army is using to design LoADS, is less severe than the threat projected in some intelligence assessments. Unless the Army adequately considers the more severe threat in designing LoADS, it may not be a genuine option for assuring MX’s survivability.” In this sense, the new ABM shares a critical weakness with the old Safeguard: against an optimistic assessment of the Soviet threat, it is unnecessary; against a pessimistic assessment, it is inadequate.

If LoADS proves inadequate by itself, the BMD Command will add on the upper-layer, or “exo-atmospheric,” defense, with its optical probe and longer-range interceptor. Both LoADS and the exo-atmospheric defense system would also be necessary if the U.S. wanted to defend Strategic Air Command bomber bases, submarine pens, Minuteman or Titan ICBMs, communications centers, or cities—in short, any targets not deceptively based, like the MX, in multiple shelters.

Though the Pentagon doesn’t like to say so, the layered defense system would also be necessary to defend the MX missiles if they were merely housed in existing silos and the lavish multiple-shelter system were never built—an increasingly likely outcome, given the system’s enormous expense and diminishing political popularity. Indeed, one of President Reagan’s closest friends and political advisers, Senator Paul Laxalt, who comes from Nevada—among the proposed sites for the multiple-shelters plan—has come out in favor of simply putting the MX missiles in existing Minuteman silos and defending them with the new ABM. Others prefer putting them aboard huge cargo aircraft and, in case of nuclear war, launching them from the air—a solution that, incidentally, was rejected by the Carter Administration on the grounds that it would cost even more than multiple shelters.

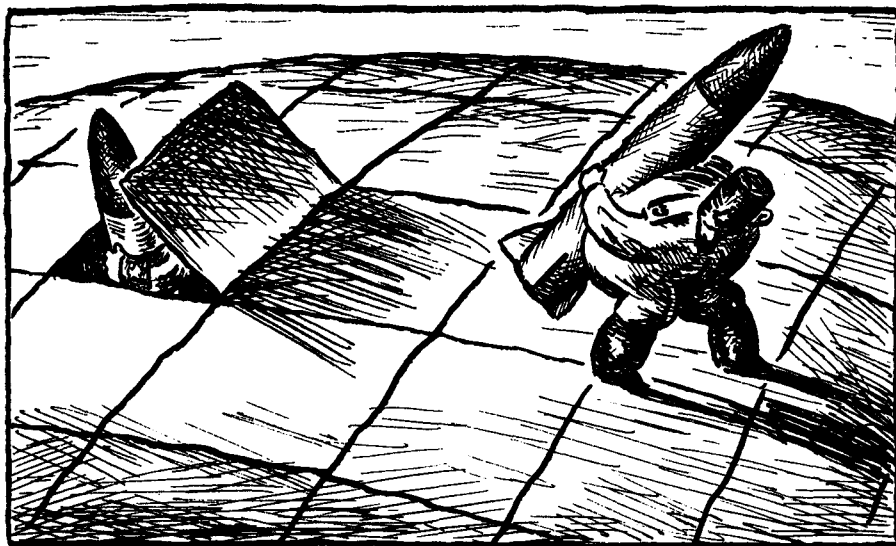
Unfortunately, exo-atmospheric defense involves problems even more severe than those of LoADS. First, the suborbital probe would have to examine thousands of objects in space. Ordinarily, this might not be much of a problem. The probe’s seeker is attracted to hot

objects, and most natural objects in outer space are cold. But what if the Soviets released not only warheads from their missiles but also decoys loaded with some sort of heat source? Or what if the Soviets put warheads and decoys inside shiny, Mylar-coated balloons that reflected the heat from the earth underneath and the cold of space on top, and that burned only after entering the atmosphere (an idea suggested by physicist Richard Garwin, of IBM and Harvard)? Then the probe would be confused. It would have to track hundreds or thousands of spurious targets, not knowing which were warheads.

Or the Soviets could include in their attack submarine-launched missiles, which will be more accurate a decade from now. The U.S. optical probe, scanning only a rather narrow area over the North Pole, would not even see them coming. (Other early-warning systems would detect the missiles, but not in so refined a way as to relay relevant information to an ABM system.) Or the Soviets could explode a very large nuclear weapon in space. Many analysts, including BMD officials in Huntsville, Alabama, doubt that the probe or the long-range interceptor could withstand the radiation. Another problem is that charged particles from the explosion—which would remain in space for quite a long time, having no atmosphere to absorb them—would create a huge screen of heat along the earth’s magnetic field. The probe and the exo-atmospheric ABM missile—or anything with infrared seekers—would almost certainly be attracted to these “ghost targets” as well as to the real warheads.

Another way for the Soviets to confuse the upper-layer defense is to guide their missiles along flight paths that cross each other. The problem of “crossing trajectories” has baffled radar designers for more than twenty years, and no solution seems in sight. When a computer system tracks the path of a missile, it first sees where the missile is currently located and, extrapolating from where the missile was seconds ago, calculates where it will be seconds later. Then it sees where the missile is again, notes slight errors in its initial prediction, and, from that adjustment, calculates where it will be seconds later. Slight errors are inevitable along the way, and continuous re-estimates are necessary—otherwise the errors

will compound themselves, resulting in very large mistakes at the end of the line. But picture two warheads, A and B, moving close but not quite parallel to each other. Toward the end of the flight, they cross each other's path, forming an elongated X. Immediately after the point at which they appear to cross, the computer cannot tell whether the "blips" starting to form the lower half of the X belong to the trajectory of warhead A or warhead B. It cannot make any more correct calculations of where the warheads will be next, because it does not know where they were before.



MANY BMD ADVOCATES concede these difficulties, but they say what they have been saying for twenty-five years: the problem can be worked out with a few adjustments in computer programming, or a little more testing, or a bit more money. Major General Grayson D. Tate, BMD program manager, makes the case most dramatically. He points out that in 1948, leading scientists said that man could not solve the problem of landing and moving about on the moon for another 200 years; that by 1937, nobody had foretold the development of jet engines, radar, inertial guidance, computers, artificial satellites, or nuclear weapons. "Technology is *not* the decisive factor" of a good ballistic-missile defense, he says. "Rather, the decisive factor is the *decision* to get a satisfactory defense. The technological problems in virtually everything we have undertaken have been solved, once we decided to solve them."

Two considerations make General Tate's statement less than compelling.

First, comparing the BMD problem with what then seemed to be the far-fetched task of building an atomic bomb or going to the moon constitutes a remarkable admission that the technology necessary to make these systems work—especially for the exo-atmospheric defense—lies far in the future. Second, and more to the point, his analogies are not revelant: trying to shoot down a determined enemy's warheads presents a set of obstacles entirely different from the challenges he cites. Addressing the same sorts of comparisons in the August, 1969, *Scientific American*, the physicist Herbert York,

director of the Defense Advanced Research Projects Agency in the Eisenhower Administration, wrote: "These analogies would be more pertinent if . . . someone were to jerk the moon away just before the astronauts landed, or if . . . nature were to keep changing the nuclear-reaction probabilities all during the development of the hydrogen bomb and once again after it was deployed."

In short, as long as the Soviets keep competing, as long as they try to befuddle our efforts (just as we try to befuddle theirs), the chances of a "satisfactory" ballistic-missile defense remain very slim.

ALL THE ABOVE implicitly accepts the fundamental premise of the analysis offered by proponents of the new ABM—that American ICBMs will soon be highly vulnerable to Soviet attack, that an MX/multiple-shelter system is thus necessary, and that, since that system could be saturated by a Soviet

attack within a decade, an ABM system must also be constructed to defend it. Much evidence suggests that this basic assumption is false.

First, fewer than 25 percent of U.S. strategic nuclear warheads rest on land-based missiles. Even if they were destroyed, several thousand weapons would survive on alert bombers and virtually invulnerable nuclear submarines.

Second, Soviet warheads may not be so accurate as many calculations presume. Missile accuracy is traditionally measured according to "CEP," or "circular-error-probable," the distance from a target within which a warhead is likely to land 50 percent of the time. This means that the other 50 percent of the time it will land farther away, sometimes considerably farther. Statistical probabilities assume throwing the dice many times; in nuclear war you get only one roll. The uncertainties are considerable: a slight error in any of the dozens of stages between the launching of a missile and its detonation, or in the timing of the attack, could completely throw off calculations about the likelihood of destroying a heavily fortified target such as a missile silo.

Finally, there is the problem of "bias." In a nuclear war the U.S. and the USSR would send their missiles across trajectories completely different from those traveled in test flights. Unpredictable errors caused by gravitational and other differences along the way—especially over the electromagnetic-drenched North Pole, never before traversed by missiles—are bound to be considerable. Then, coming back into the atmosphere, the warhead would hit several layers of atmosphere, each with unpredictable, radically different, and, in many cases, very fast wind velocities that would throw it still farther from its target. In one of the most comprehensive articles on bias, published in the November 20, 1980, *New York Review of Books*, Andrew and Alexander Cockburn quote scientists who calculate that errors in missile accuracy due to wind variations alone could amount to 1,320 feet—this in addition to the error estimated by the CEP. When defense analysts predict that Soviet missiles will destroy 90 percent of American land-based missiles, they assume errors of 500 or 600 feet and *no* bias. Doubling or tripling that error sharply reduces the chance

that a Soviet warhead will actually destroy an American missile silo—and the same holds true for American warheads fired at Soviet missile silos.

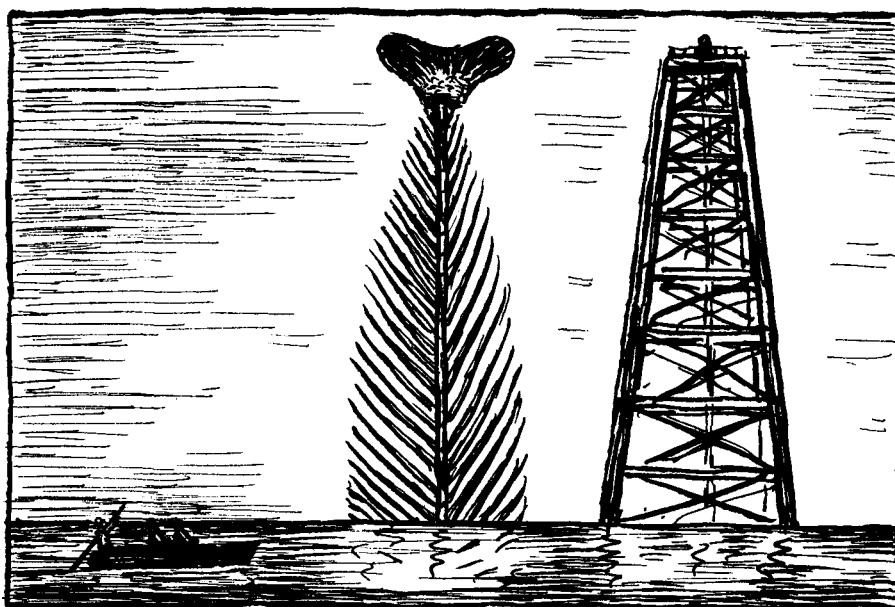
“WELCOME TO THE world of strategic forces, where we target weapons that don't work against threats that don't exist.” That was how Ivan Selin, then a deputy assistant secretary of defense, jovially introduced his annual nuclear-strategy seminar to the Pentagon's Office of Systems Analysis, popularly known as “the whiz kids,” in the late 1960s. It also serves well as an introduction to the next ABM debate.

Will the new ABM work, and does the United States need it? Only if scientists learn to design sensors, radars, and computers that resist and survive enor-

mous nuclear explosions; if the Soviets don't go out of their way to defeat the ABM either by spoofing it or by using more offensive weapons; and if the Soviets somehow overwhelm the bias problem. In other words, no, the ABM will not work, and no, even if it did, the United States does not need it—at least not until the Americans and the Soviets achieve several miraculous engineering breakthroughs and break a few laws of physics. Until then, the ABM can be truly summed up by Ivan Selin's half-serious description of the whole world of nuclear strategy: weapons that don't work, threats that don't exist.

—Fred Kaplan

Fred Kaplan writes frequently on defense issues and is currently at work on a book about the nuclear strategists.



RESOURCES

OIL, FISH, AND GEORGES BANK

The questions on Georges are: Is there oil here? And if so, what will it do to the fish?



FOR MORE THAN 350 years, men have been going to Georges Bank, 150 miles out on the continental shelf east of Cape Cod, to fish for cod, haddock, yellowtail flounder, scallops, lobsters. They have decimated stocks more than once, but the fisheries are still there.

Back in the early seventies, when catches were unsustainably high, the harvest was, acre-for-acre, the largest in the world.

Now other men are heading out to Georges to hunt—through holes inches wide and miles deep—for oil and gas. There won't be many men at first, perhaps a few hundred aboard a handful of exploratory rigs. But that is enough to signal the fact that along the great submerged thumb stretching from Nantucket Shoals toward Nova Scotia, competition for resources has begun in earnest.

The conflict involves two resources in one place, both of importance to the modern world. Oil from Georges would reduce our dependence on foreign sup-

plies, if only slightly. Fish—a resource capable of providing half our minimum protein needs—are a vital supplement to our agricultural yields. Learning how to protect the stocks on Georges from pollution and overfishing will benefit the resource everywhere within our 200-mile-wide fisheries-conservation zone.

Georges Bank covers about 10,000 square miles, if one limits the area to the 100-meter isobath. Its southeastern, or seaward, side is cut by canyons eroded when the sea was much lower; 15,000 years ago, so much water was locked up in glaciers that a lot of Georges was dry land. As the ice melted and the ocean rolled back, Georges became a high-energy patch of sea, never idle. Tidal currents flow around the shoals, mixing the sea, rolling the bottom into sand waves. Nutrient-rich water from the ocean and the Gulf of Maine wells up onto the bulge of the bank. Under certain conditions, a gyre apparently forms in the upper eighty meters or so—a current with a clockwise rotation which acts like a corral for feeders and food. Warm-core eddies spinning off the nearby Gulf Stream visit occasionally along the seaward edge. They make off with quantities of planktonic organisms, many of which never return.

Nutrients and currents have combined to make Georges a place to fish. In 1979, the last year for which detailed figures are available at this writing, the catch from Georges Bank totaled some 234,000 metric tons, worth more than \$122 million—say, 8 percent of this country's total landings, a good deal more if one considers only food fish. American fishermen accounted for 60 percent of the haul, with Canadian fishermen strongly represented in the remainder. All told, the New England fishing industry, from net to skillet, contributes perhaps a billion dollars to the regional economy.

IT WASN'T UNTIL AFTER World War II that drillers followed oil out to sea, working from barges. Now there are about 3,200 producing oil wells in the Gulf of Mexico, a few of them in waters 1,000 feet deep. There are wells off California and Alaska and around the world's continental shelves—in the North Sea, in the Indian Ocean. Together, they account for about one fifth of global oil production.

Most exploration drilling is done from mobile rigs—hulls with a derrick amidships; jack-ups that ratchet their legs down into the bottom and push the drilling deck up in the air above storm-wave height; and semi-submersibles, vessels that flood their pontoons so that they ride deep and stably. Down from these rigs to the wellhead on the sea floor run riser pipes—thick tubes containing the drill string and all that goes with it. These are huge structures. The semi-submersibles are much in demand for heavy weather like that around Georges, where winter winds spasm every ten days or so and where five-foot seas in the cold seasons are a blessed relief. The semis have decks that can run to more than an acre and pontoons longer than soccer fields.

Interest in what the oil people call the Atlantic frontier (a region virgin to the wildcatter's drill) arose in the sixties, when a few companies began shooting seismic lines, bouncing shock waves off layers of rock under the sea floor to read the formations. Things looked promising enough so that eventually a lease sale was held for an area out on the Baltimore Canyon. In three years of drilling, some gas and a little oil have been found, but not enough at this point to warrant production. The Hibernia find off Newfoundland and some gas strikes further south, off Nova Scotia, have raised hopes again, however.

Georges Bank lies between the Canadian wells and the Baltimore Canyon. Beneath it is a thick wedge of sedimentary rock that formed when North America pulled away from West Africa 190 million years ago. Part of the wedge is made up of ancient reefs that impounded sediments swept from the continent. The troughs behind the reefs filled to overflowing with layers of sand, mud, and organic material. Some of that organic material is now four miles down. It may have had a chance to cook at a couple of hundred degrees Fahrenheit under the right conditions to produce oil or, more likely, gas.

The North Atlantic region, or Georges Bank, ranks sixth in estimated undiscovered recoverable resources for offshore areas studied by the United States Geological Survey. Its mean estimates, indicating amounts most likely to occur, are .4 billion barrels of oil and 2.5 trillion cubic feet of gas. That's not much—only about half of what is pre-

dicted for the Baltimore Canyon area, and about 1.4 percent of total offshore oil estimates and less than 1.5 percent of estimated offshore gas. There may be nothing there at all that is commercially producible. The only way to find out is to drill and keep drilling, probably for years, until Georges is either developed or abandoned.

IT DIDN'T TAKE LONG for opposition to oil operations on Georges to heat up. Fishermen worried about pollution, crowded ports, cluttered fishing grounds. Environmental groups such as Boston's Conservation Law Foundation fought for adequate safeguards to protect fisheries and helped prod the Carter Administration into establishing an interagency biological task force charged with developing a program to monitor the effects of drilling and production on the biota of the bank. James Watt, Ronald Reagan's secretary of the interior, has elected to fund the program. But monitoring carries the implication of increased regulation, and that is simply not popular now along the Potomac, nor does it fit in with Watt's plan to accelerate offshore leasing.

Oil is one of the most complex substances known to science, and its effects on the marine environment are labyrinthine. Some of its thousands of components have been shown to be lethal; many are toxic. John Farrington, a marine geochemist at Woods Hole Oceanographic Institution, has been studying petroleum hydrocarbons in the ocean for more than a decade. In testimony before a congressional committee, Farrington complained about the uneven quality of research in his field. "If you are an environmentalist intent on painting a picture of bleak doom such as 'the oceans are dying,' you can find a literature reference to add support to your claim. If you are an industry spokesman intent on minimizing the effects of oil in the marine environment, you can also find a literature reference to support your claim."

The oil people insist they aren't trying to minimize anything. "We haven't hurt the fishing industry in other areas," says a Mobil executive. "Why, then, are we trying to hurt it on Georges Bank?" The peripatetic panels the American Petroleum Institute sends around, most recently to the fishing towns near Georges, work that theme hard. They admit that under cer-

L.L.Bean®

Outdoor Sporting Specialties



Touring Cap

Attractive and sturdy sports cap of brushed pigskin leather. Pigskin "breathes", is flexible and retains shape. Impregnated with Scotchgard®, highly rain resistant, with snapped down visor. Fully rayon lined. Easily cleaned by brushing. Color, Taupe. Sizes: Sm.(6¾-7¼), Med.(7-7½), Lg.(7½-7¾), XLg.(7¾-8¼).

Please Ship Postpaid

#1265W Touring Cap, Size _____ @ \$15.75

☐ Check Enclosed
☐ VISA

☐ Master Card
☐ American Express

Card Number _____

Exp. Date _____

☐ SEND FREE CATALOG

Name _____

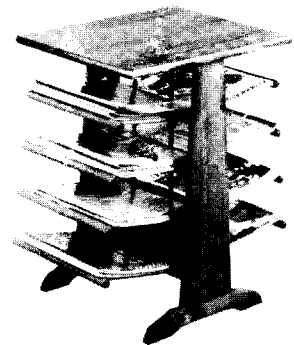
Address _____

City _____

State _____ Zip _____

L. L. Bean, Inc.

152 Casco St., Freeport, ME 04033



The Magazine End Table

At our lowest prices in two years! All pine and hardwood. 23"h x 18"w x 21"d.

Kit _____ now only \$24

Finished (dk. pine) _____ now only \$34
(Add \$4 postage)

Name _____

Address _____

City _____ State _____ Zip _____

Yield House®

Dept. X19A
North Conway, N.H. 03860

Call toll-free: 1-800-258-4720

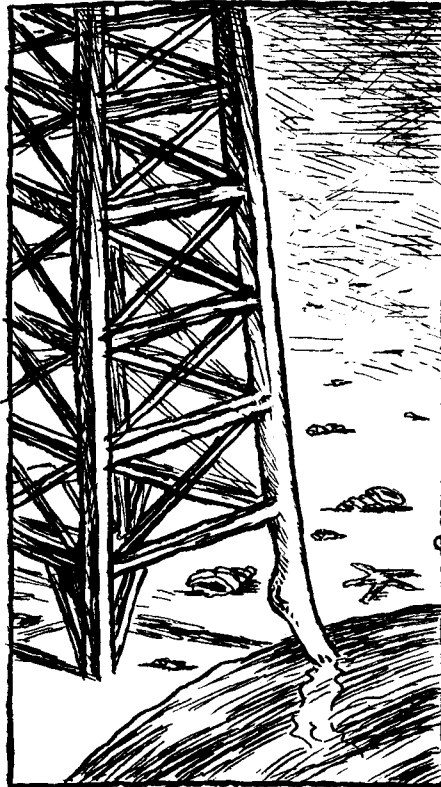
tain conditions oil will kill marine organisms. But they say that fish and oil have coexisted for decades in the Gulf, and they have statistics showing that in the North Sea and other spots on the continental shelves of the world catch tonnages have shown little if any drop after oil production has begun. They cite reports from the National Academy of Science indicating that in any case offshore oil activities contribute only one percent of the petroleum hydrocarbons entering the world oceans. (By far the greatest pollution is caused by river runoff and atmospheric fallout.)

STUDIES OF INSHORE areas have shown long-term benthic effects of oil. Amphipods and other types of small "bugs" teeming in the estuaries and marsh muds near the Cape Cod town of Falmouth were ravaged by fuel oil spilled from a barge in 1969. Howard Sanders, of Woods Hole Oceanographic Institution, and his colleagues studied the damage and reported that the complex multispecies ecosystem of the bottom became one in which large numbers of a few opportunistic species predominated. Sanders and some oil-company scientists feuded bitterly over his findings, but what Sanders was talking about had little to do with predicting what might happen if there were an oil spill near a place like Georges.

In 1976, the tanker *Argo Merchant*, miles off course, piled up on Nantucket Shoals, dumped a full cargo of crude into the winter sea—and nothing much appeared to happen. Winds off the land pushed pancakes of the stuff out into the Gulf Stream and on toward the British Isles. In the general scoffing at environmentalists, little public attention was paid to the fact that a small amount of oil did sink to the bottom and was adsorbed on sediment particles or in fecal pellets of plankton and other near-surface organisms, and some local damage was done. More important, oil from the slick stuck to floating fish eggs and larvae, killing 20 percent of the cod eggs and 46 percent of the pollock eggs it touched. Had the *Argo Merchant* gone aground during the heavy spawnings of spring and summer, and had the winds been different, there might not have been snickers and sighs of relief.

The spill from the *Amoco Cadiz*, the largest spill to date, was a different sto-

ry. Eric Schneider, formerly of the Environmental Protection Agency and now with the University of Rhode Island's Center for Ocean Management Studies, looked at the effects of the 1.6 million barrels of crude oil spread along hundreds of square kilometers of the English Channel off the French coast in the spring of 1978. Working with the French and funded in part by the U.S. oil industry, Schneider found that not only were populations of amphipods and other small benthic creatures severely damaged but groundfish also suffered, if only because most feed on bottom bugs. "That surprised the oil



companies," Schneider says. "I told them there was a year class of flounder missing off that coast." (A year class comprises fish of a certain species, all born in the same spawning season, which have survived to harvesting size.)

Down in home waters, the oil industry financed a study of petroleum pollution by a group of research centers along the Gulf of Mexico, working together as the Gulf Universities Research Consortium (GURC). The consensus report was released in 1978 and showed, according to an American Petroleum Institute spokesman, that "no measurable effects [of oil] have been observed on such indicators of the

health of marine communities as population levels of various organisms, species diversity, and size, growth rate, or reproducibility of various organisms." The spokesman concluded that "low-level, chronic exposure to crude oil has, at most, negligible effects on marine life."

That interested Howard Sanders. He went through piles of research findings on which the GURC consensus report was based and, he said, found much that was at odds with its conclusions. Specifically, several GURC investigators had been unhappy with the control aspects of the operation. Control sites are supposed to be free of the substance whose effects are being tested. But, Sanders argued, that was not the case. When the GURC report said there was little or no difference in measurements of marine life near active oil platforms and at control areas, what it apparently was reflecting was not health but low-level malaise. The whole area, said Sanders, was slightly but surely polluted.

Good scientific measurements are being made on the bank right now, some of which can provide crucial baseline information. The National Marine Fisheries Service (NMFS) is synthesizing decades of fish-stock assessments and other data that may indicate why Georges is so rich biologically. Data acquired recently by investigators at Woods Hole and commercial laboratories may, when worked up, yield a more complete picture of the way the currents work; at long last the strength and extent of the clockwise gyre around the bank may be demonstrated. Perhaps the most elegant measurements are being taken by the Geological Survey. They are designed to reveal patterns and frequency of sediment transport, particularly fine-grained sediments of the sort that trap oil particles in the ocean.

THE INITIAL ENVIRONMENTAL disturbance could come from the drilling muds. These are chemical concoctions piped down the drill hole to provide a hydraulic head that will keep pressures from perforated rock formations in check, to lubricate the drill bit, and to flush out cuttings. Until recently, formulae have been regarded by the oil and mud companies as proprietary information, and even now there are so many muds and so little information

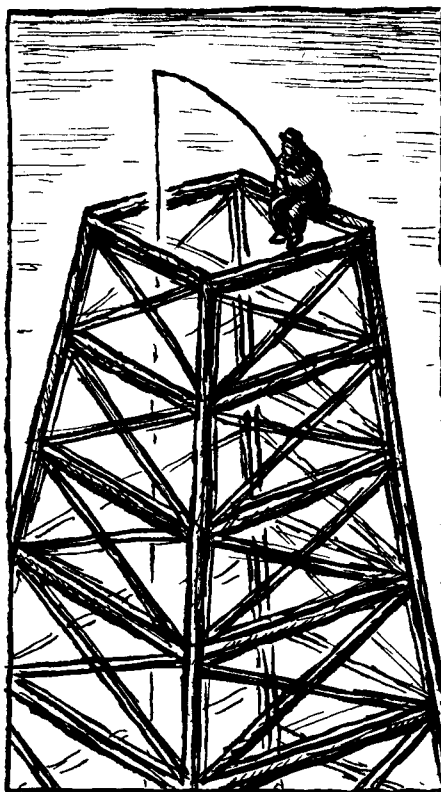
about them that it is difficult to draw up a monitoring scheme for them. The chief culprits seem to be heavy metals such as cadmium and lead, some of which occur as contaminants in ores such as barite, which is processed into a substance to weight the muds. But even without these poisons, muds discharged during drilling can spread out on the bottom around the rig and suffocate bottom life. One well usually accounts for perhaps 1,000 cubic meters of mud and drill cuttings, enough to cover a square kilometer to a depth of one millimeter. If the grains are fine enough, that seemingly negligible amount may be sufficient to clog the filter-feeding mechanisms of some benthic organisms and kill them. Muds from the half-dozen exploratory rigs that will be on the bank in the beginning will probably not be much of a problem. Mud from a fully developed field may be another question.

But what also worries many scientists is the all-but-invisible chronic seepage of pollutants, the phenomenon the GURC study sought to address. It is true that rigs are likely to be run efficiently and with more cleanliness than a layman might think. But leaks and dribbles and discharges do occur: from the platforms; from tankers (even if modern vessels with segregated ballast systems are used, some oil is sure to be spilled during winter loadings on Georges); and from pipelines. (If gas is what is found and produced, pollution should be minimal—assuming it is dry gas unmixed with liquid hydrocarbons—but in the case of oil, pipeline ruptures could be disastrous.)

Bob Howarth, of the Marine Biological Laboratory in Woods Hole, has been trying to arouse concern over the chronic discharge problem. "On Georges Bank," he says, "every five years or so, you get a really outstanding population of adult fish. No one knows what causes that. One of the better guesses is that it's related to the integrity of the gyre on Georges. If you have a really tight gyre, where the current pattern actually is closed, the fish eggs and larvae maintain themselves on the bank, where there's high primary production. You have a high survival rate and a good age class. If that's true, the same years the gyre's tight may be those in which you'll have the biggest problems with chronic oil releases building up in the gyre. What you'd get

then would be serious damage to the fish eggs and larvae, and an end to the big age classes. Every year would be mediocre to average. It'll be harder than hell to show." Howarth pauses. "But it's a reasonable scenario, and I think the solution is to minimize those chronic discharges."

Howarth is talking about extremely low levels of pollution. The studies he mentions deal with concentrations of ten parts per billion—ten parts of pollutant to a billion parts of seawater, levels discernible by only the most sophisticated laboratory equipment. Yet these extreme dilutions sicken



plaice and disorient lobsters. Some research indicates that in time they may severely reduce the populations of diatoms that now predominate on Georges at the base of the food chain. The worry is that the diatoms would be replaced by smaller flagellates, with unknown but possibly catastrophic effect on the fisheries.

There are detectable traces of chronic pollution—from tankers carrying oil to New England, from the fouled rivers—out on Georges right now. Why haven't those substances produced measurable effects on fish eggs and larvae? The answer could be that linking cause to effect in the water column is difficult under any circumstances. Fish, eggs,

nutrients, pollutants, are in constant flux. It may be important that eggs and larvae on Georges are sustained from time to time in a gyre (as opposed to the young of most commercially important Gulf species, which spend their early days in estuaries and marshes). But putting numbers to the processes that govern the survival of those tiny organisms—distinguishing damage due to low-level pollution from damage due to storms or currents or a temporary drop-off in food—is next to impossible at this point. Marvin Grosslein, a fisheries biologist at Woods Hole who is working on NMFS productivity studies, says pollution is "simply one of a jumble of factors that we haven't had the logistic resources or the technology or the insight to identify."

The bottom appears more amenable to research—and probably in the long run more important in terms of effects of drilling and production. Fred Grassle, of the Oceanographic, a benthic biologist, has been measuring natural changes on and in the bank's sand and gravel, particularly those wrought by winter storms. Though oil discharges can do away with a year class of fish, Grassle thinks that concern should be focused on where toxic materials concentrate and where damage can mean recovery only after years or decades. He and others have advised the biological task force on the matter, and that is the direction the federal monitoring plan will take.

The arrival of the oil industry on Georges was so long anticipated that it lost some dimensions of reality in the waiting. The *Zapata Saratoga* cured that illusion in July when it flooded its pontoons and settled down over the bank to make a hole for Shell. Now that the place is both a fishing ground and a frontier area, questions about resource competition will be answered. Some, like the nature and extent of the petroleum resource, probably will have to await the outcome of two more lease sales—one, in deeper water, in August of next year, and the other in February of 1984. But in time, New England and the nation will know who benefits at whose expense.

—William H. MacLeish

William H. MacLeish is editor of Oceanus, a magazine of marine science published by Woods Hole Oceanographic Institution. He is writing a book about Georges Bank.

Some want to keep our land unspoiled. Some want to explore it. We want to explore without spoiling.

There's a strange either-or proposition building up in this country.

It's one that says either we completely preserve our public lands by turning them into permanent wilderness, or we tear them up and exploit them to the fullest for their natural resources.

Look at the facts. Our public lands currently supply an estimated 10% of our energy. Yet they actually contain about one half of all our known domestic energy resources — vast amounts of coal, oil shale, tar sands, crude oil and natural gas.

Over 40% of the 760 million acres the federal government owns has been withdrawn from mineral mining or leasing.

Another 25% has been placed under regulation that effectively precludes oil, gas and mining operations.

All without ever finding out first, through preliminary exploration, what the resource potential of that land really is.

The desire for land that stands pure and pristine is certainly understandable. But, surely, in these times of scarcity, our need for energy and mineral resources is just

as pressing. We know for a fact that exploration can easily be conducted in an environmentally sound manner.

Doesn't it then make sense that we invest in exploring and evaluating our public lands before classifying them as wilderness or otherwise, and locking them up forever?

At least then we could make sure we're doing the right thing.

Or so it seems to us at Atlantic Richfield.

There are no easy answers.

ARCO



Atlantic Richfield Company

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CATHEDRAL

A SHORT STORY BY RAYMOND CARVER

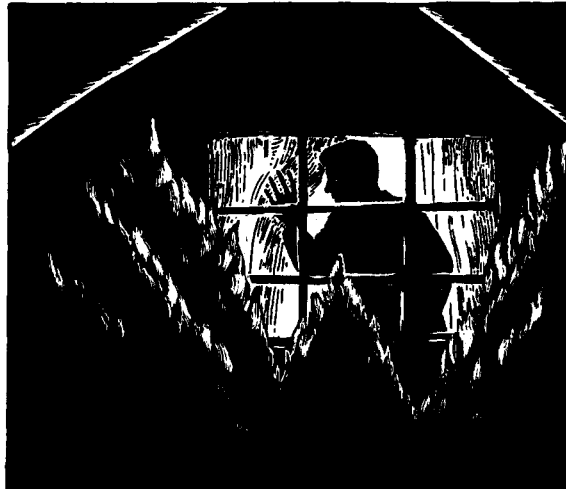
THIS BLIND MAN, AN OLD FRIEND OF MY WIFE'S, HE was on his way to spend the night. His wife had died. So he was visiting the dead wife's relatives in Connecticut. He called my wife from his in-laws'. Arrangements were made. He would come by train, a five-hour trip, and my wife would meet him at the station. She hadn't seen him since she worked for him one summer in Seattle ten years ago. But she and the blind man had kept in touch. They made tapes and mailed them back and forth. I wasn't enthusiastic about his visit. He was no one I knew. And his being blind bothered me. My idea of blindness came from the movies. In movies, the blind moved slowly and never laughed. Sometimes they were led by seeing-eye dogs. A blind man in my house was not something I looked forward to.

That summer in Seattle she had needed a job. She didn't have any money. The man she was going to marry at the end of the summer was in officer's training school. He didn't have any money, either. But she was in love with the guy, and he was in love with her, etc. She'd seen something in the paper: Help Wanted—Reading for Blind Man, and a telephone number. She phoned and went over, was hired on the spot. She'd worked with this blind man all summer. She read stuff to him, case studies, reports, that sort of thing. She helped him organize his little office in the county social service department. They'd become good friends, my wife and the blind man. How do I know these things? She told me. And she told me something else. On her last day in the office, the blind man asked if he could touch her face. She agreed to this. She told me he ran his fingers over every part of her face, her nose—even her neck! She never forgot it. She even tried to write a poem about it. She was always writing a poem. She wrote a poem or two every year, usually after something really important had happened to her.

When we first started going out together, she showed me the poem. In the poem she recalled his fingers and the way they had moved around over her face. In the poem she talked about what she had felt at the time, about what went through her mind as he touched her nose and lips. I can recall I didn't think much of the poem. Of course I didn't tell her that. Maybe I just don't understand poetry. I admit it's not the first thing I reach for when I pick up something to read.

Anyway, this man who'd first enjoyed her favors, the officer-to-be, he'd been her childhood sweetheart. So okay. I'm saying that at the end of the summer she let the blind man run his hands over her face, said good-bye to him, married her childhood etc., who was now a commissioned officer, and she moved away from Seattle. But they'd kept in touch, she and the blind man. She made the first contact after a year or so. She called him up one night

from an Air Force base in Alabama. She wanted to talk. They talked. He asked her to send him a tape and tell him about her life. She did this. She sent the tape. On the tape she told the blind man about her husband and about their life together in the military. She told the blind man she loved her husband but she didn't like it where they lived and she didn't like it that he was a part of the military-industrial complex. She told the blind man she'd written a poem and he was in it. She told him that she was writing a poem about what it was like to be an Air Force officer's wife in the Deep South. The poem wasn't finished yet. She was still writing it. The blind man made a tape. He sent her the tape. She made a tape. This went on for years. My wife's officer was posted to one base and then another. She sent tapes from Moody AFB, McGuire, McConnell, and finally Travis, near Sacramento, where one night she got to feeling lonely and cut off from people she kept losing in that moving-around life. She balked, couldn't go it another step. She went in and swallowed all the pills and capsules in the medicine cabinet and washed them down with a bottle of gin. Then she got into a hot bath and passed out.



Raymond Carver is the author of two collections of short stories—What We Talk About When We Talk About Love and Will You Please Be Quiet, Please?

But instead of dying she got sick. She threw up. Her officer—Why should he have a name? He was the childhood sweetheart, and what more does he want?—came home from a training mission, found her, and called the ambulance. In time, she put it on the tape and sent the tape to the blind man. Over the years she put all kinds of stuff on tapes and sent the tapes off lickety-split. Next to writing a poem every year, I think it was her chief means of recreation. On one tape she told the blind man she'd decided to live away from her officer for a time. On another tape she told him about her divorce. She and I began going out, and of course she told her blind man about this. She told him everything, or so it seemed to me. Once she asked me if I'd like to hear the latest tape from the blind man. This was a year ago. I was on the tape, she said. So I said okay, I'd listen to it. I got us drinks and we settled down in the living room. We made ready to listen. First she inserted the tape into the player and adjusted a couple of dials. Then she pushed a lever. The tape squeaked and someone began to talk in this loud voice. She lowered the volume. After a few minutes of harmless chitchat, I heard my own name rasped out by this stranger, this man I didn't even know! And then this: "From all you've said about him, I can only conclude—" But we were interrupted, a knock at the door, something, and we didn't get back to the tape. Maybe it was just as well. I'd heard enough, anyway.

Now this same blind stranger was coming to sleep in my house.

"Maybe I could take him bowling," I said to my wife. She was at the draining board doing scalloped potatoes. She put down the knife she was using on the onion and turned around.

"If you love me," she said, "you can do this for me. If you don't love me, okay. But if you had a friend, any friend, and the friend came to visit, I'd make him feel comfortable." She wiped her hands with the dish towel.

"I don't have any blind friends," I said.

"You don't have *any* friends," she said. "Period. Besides," she said, "goddammit, his wife's just died! Don't you understand that? The man's lost his wife!"

I didn't answer. She'd told me a little about the blind man's wife. The wife's name was Beulah. Beulah! That's a name for a colored woman.

"Was his wife a Negro?" I asked.

"Are you crazy?" my wife said. "Have you just flipped or something?" She picked up the onion. I saw it hit the floor, then roll under the stove. "What's wrong with you?" she said. "Are you drunk?"

"I'm just asking," I said.

Right then my wife filled me in with more detail than I cared to know. I made a drink and sat at the kitchen table to listen. Pieces of the story began to fall into place.

Beulah had gone to work for the blind man the summer

after my wife had stopped working for him. Pretty soon Beulah and the blind man had themselves a church wedding. It was a little wedding—Who'd be anxious to attend such a wedding in the first place?—just the two of them, and the minister and the minister's wife. But it was a church wedding just the same. What Beulah had wanted, he'd said. But even then Beulah must have been carrying cancer in her lymph glands. After they had been inseparable for eight years—my wife's word, "inseparable"—Beulah's health went into a rapid decline. She died in a Seattle hospital room, the blind man sitting beside the bed and holding on to her hand. They'd married, lived and worked together, slept together—had sex, sure—and then the blind man buried her. All this without his having ever seen what the goddamned woman looked like. It was beyond my understanding. Hearing this, I felt sorry for the blind man for a minute. And then I found myself thinking what a pitiful life this woman must have led. Imagine a woman who could never see herself reflected in the eyes of her loved one. A woman who could go on day after day and never receive the smallest compliment from her beloved. A woman whose husband would never read the expression on her face, be it misery or something better. Someone who could wear makeup or not—what difference to him? She could, if she wanted, wear green eye shadow around one eye, a straight pin in her nostril, yellow slacks and burgundy pumps, no matter. And then to slip off into death, the blind man's hand on her hand, his blind eyes streaming tears—I'm imagining now—her last thought maybe this: that her beloved never knew what she looked like, and she on an express to the grave. Robert was left with a small insurance policy and half of a twenty-peso Mexican coin. The other half of the coin went into the box with her. Pathetic.

SO WHEN THE TIME ROLLED AROUND, MY WIFE WENT to the rail station. With nothing to do but wait—and sure, I blamed him for that—I was having a drink and watching TV when I heard the car pull into the drive. I got up from the sofa with my drink and went to the window to have a look.

I saw my wife laughing as she parked the car. I saw her get out of the car and shut the door. She was still wearing a smile. Just amazing. She went around to the other side of the car to where the blind man was already starting to get out. This blind man, feature this, he was wearing a full beard! A beard on a blind man! Too much, I say. The blind man reached into the back seat and dragged out a suitcase. My wife took his arm, shut the car door, and, talking all the way, moved him down the drive and then up the steps to the front porch. I turned off the TV. I finished my drink, rinsed the glass, dried my hands. Then I went to the door.

My wife said, "I want you to meet Robert. Robert, this is my husband. I've told you all about him." She closed

the porch screen. She was beaming. She had this blind man by his coat sleeve.

The blind man let go of his suitcase and up came his hand.

I took it. He squeezed hard, held my hand, and then he let it go.

"I feel like we've already met," he boomed.

"Likewise," I said. I didn't know what else to say. Then I said, "Welcome. I've heard a lot about you." We began to move then, a little group, from the porch into the living room, my wife guiding him by the arm. He carried his suitcase in his other hand. My wife said things like, "To your left here, Robert. That's right. Now watch it, there's a chair. That's it. Sit down right here. This is the sofa. We just bought this sofa two weeks ago."

I started to say something about the old sofa. I'd liked that old sofa. But I didn't say anything. Then I wanted to say something else, small talk, about the scenic Hudson River. How going to New York, sit on the right-hand side of the train, and coming from New York, the left-hand side.



KNEELING DOWN TO LOOK INTO A CULVERT

I kneel down to peer into a culvert.
The other end seems far away.
One cone of light floats in the shadowed water.
This is how our children will look when we are dead.

I kneel near floating shadowy water,
watching water flowing in a tunnel—
blue sky widens the other end—
darkened by the shadowy insides of the steel.

Are they all born? I walk on farther;
out in the plowing I see a lake newly made.
I have seen it before . . . it is a lake
I return to when all my family, grown, are gone.

I have fathered so many children and returned
to that lake—grayish flat slate banks,
low arctic bushes. I am a lake-serpent, throwing water drops
off my head. Behind me my arching body follows.

How long I stay there alone! For a thousand years
I am alone, with no duties, living as I live.
Then one morning a feathery head pokes from the water.
I fight—it's time—it's right—and am torn to pieces fighting.

—Robert Bly

"Did you have a good train ride?" I said. "Which side of the train did you sit on, by the way?"

"What a question, which side!" my wife said. "What's it matter which side?" she said.

"I just asked," I said.

"Right side," the blind man said. "For the sun. Until this morning," the blind man said, "I hadn't been on a train in nearly forty years. Not since I was a kid. With my folks. That's been a long time. I'd nearly forgotten that sensation. I have winter in my beard now," he said. "So I've been told, anyway. Do I look distinguished, my dear?" he said to my wife.

"You look distinguished, Robert," she said. "Robert," she said. "Robert, it's just so good to see you." My wife finally took her eyes off the blind man and looked at me.

I had the distinct feeling she didn't like what she saw. I shrugged.

I've never met or personally known anyone who was blind. This blind man was late forties, a heavysset, balding man with stooped shoulders, as if he carried a great weight there. He wore brown slacks, brown cordovan shoes, a light-brown shirt, a tie, a sports coat. Spiffy. He also had this full beard. But he didn't carry a cane and he didn't wear dark glasses. I'd always thought dark glasses were a must for the blind. Fact was, I wished he had a pair. At first glance, his eyes looked like anyone else's eyes. But if you looked close there was something different about them. Too much white in the iris, for one thing, and the pupils seemed to move around in the sockets without his knowing it or being able to control it. Creepy. As I stared at his face, I saw the left pupil turn in toward his nose, while the other made a futile effort to keep in one place. But it was only an effort, for that eye was on the roam without his knowing it or wanting it to be.

I said, "Let me get you a drink. What's your pleasure? We have a little of everything. It's one of our pastimes."

"Bub, I'm a scotch man myself," he said fast enough, in this big voice.

"Right," I said. Bub! "Sure you are. I knew it."

He let his fingers touch his suitcase, which was sitting alongside the sofa. He was taking his bearings. I didn't blame him for that.

"I'll move that up to your room," my wife said.

"No, that's fine," he said loudly. "It can go up when I go up."

"A little water with the scotch?" I said.

"Very little," he said.

"I knew it," I said.

He said, "Just a tad. The Irish actor, Barry Fitzgerald? I'm like that fellow. When I drink water, Fitzgerald said, I drink water. When I drink whiskey, I drink whiskey." My wife laughed. The blind man brought his hand up under his beard. He lifted his beard slowly and let it drop.

I DID THE DRINKS, THREE BIG GLASSES OF SCOTCH with a splash of water in each. Then we made ourselves comfortable and talked about Robert's travels. First the long flight from the West Coast to Connecticut, we covered that. Then from Connecticut up here by train. We had another drink concerning that leg of the trip.

I remembered having read somewhere that the blind didn't smoke because, speculation had it, they couldn't see the smoke they exhaled. I thought I knew that much and that much only about blind people. But this blind man smoked his cigarette down to the nubbin and then lit another one. This blind man filled his ashtray and my wife emptied it.

When we sat down to the table for dinner we had another drink. My wife heaped Robert's plate with cube steak, scalloped potatoes, green beans. I buttered him up two slices of bread. I said, "Here's bread and butter for you." I swallowed some of my drink. "Now let us pray," I said, and the blind man lowered his head. My wife looked at me, her mouth agape. "Pray the phone won't ring and the food doesn't get cold," I said.

We dug in. We ate everything there was to eat on the table. We ate like there was no tomorrow. We didn't talk. We ate. We scarfed. We grazed that table. We were into serious eating. The blind man had right away located his foods, he knew just where everything was on his plate. I watched with admiration as he used his knife and fork on the meat. He'd cut two pieces of meat, fork the meat into his mouth, and then go all out for the scalloped potatoes, the beans next, and then he'd tear off a hunk of buttered bread and eat that. He'd follow this up with a big drink of milk. It didn't seem to bother him to use his fingers once in a while, either. He used his bread to scoop beans.

We finished everything, including half of a strawberry pie. For a few moments we sat as if stunned. Sweat beaded on our faces. Finally, we got up from the table and left the dirty plates. We didn't look back. We took ourselves into the living room and sank into our places again. Robert and my wife sat on the sofa. I took the big chair. We had us two or three more drinks while they talked about the major things that had transpired for them in the past ten years. For the most part, I just listened. Now and then I joined in. I didn't want him to think I'd left the room, and I didn't want her to think I was feeling left out. They talked of things that had happened to them—to them!—these past ten years. I waited in vain to hear my name on my wife's sweet lips: "And then my dear husband came into my life"—something

like that. But I heard nothing of the sort. More talk of Robert. Robert had done a little of everything, it seemed, a regular blind jack-of-all-trades. But most recently he and his wife had had an Amway distributorship, from which, I gathered, they'd earned their living, such as it was. The blind man was also a ham radio operator. He talked in his loud voice about conversations he'd had with fellow operators in Guam, the Philippines, Alaska, even Tahiti. He said he'd have a lot of friends there if he ever wanted to go visit those places. From time to time he'd turn his blind face toward me, put his hand under his beard, ask me something. How long had I been at my present position? (Three years.) Did I like my work? (I didn't.) Was I going to stay with it? (What were the options?)

Finally, when I thought he was beginning to run down, I got up and turned on the TV.

My wife looked at me with irritation. She was heading toward a boil. Then she looked at the blind man and said, "Robert, do you have a TV?"

The blind man said, "My dear, I have two TVs. I have a color set and a black-and-white thing, an old relic. It's funny, but if I turn the TV on, and I'm always turning it on, I turn the color set on. Always. It's funny."

I didn't know what to say to that. I had absolutely nothing to say about that. No opinion. So I watched the news program

and tried to listen to what the announcer was saying.

"This is a color TV," the blind man said. "Don't ask me how, but I can tell."

"We traded up a while ago," I said.

The blind man had another taste of his drink. He lifted his beard, sniffed it, and let it fall. He leaned forward on the sofa. He positioned his ashtray on the coffee table, then put the lighter to his cigarette. He leaned back on the sofa and crossed his legs at the ankles.

My wife covered her mouth, and then she yawned. She stretched. She said, "I think I'll go upstairs and put on my robe. I think I'll change into something else. Robert, you make yourself comfortable," she said.

"I'm comfortable," the blind man said.

"I want you to feel comfortable in this house," she said.

"I am comfortable," the blind man said.

After she'd left the room, he and I listened to the weather report and then to the sports roundup. My wife had been gone so long I didn't know if she was going to come back. I thought she might have gone to bed. I wished she'd come back downstairs. I didn't want to be



left alone with a blind man. I asked him if he wanted another drink, and he said sure. Then I asked if he wanted to smoke dope with me. I said I'd just rolled a number. I hadn't, but I planned to do so in about two shakes.

"I'll try some with you," he said.

"Damn right," I said. "That's the stuff."

I got our drinks and sat down on the sofa with him. Then I rolled us two fat numbers. I lit one and passed it. I brought it to his fingers. He took it and inhaled.

"Hold it as long as you can," I said. I could tell he didn't know the first thing.

My wife came back downstairs wearing her robe and pink slippers. "What do I smell?" she said.

"We thought we'd have us some cannabis," I said.

My wife gave me a purely savage look. Then she looked at him and said, "Robert, I didn't know you smoked."

He said, "I do now, my dear. First time for everything," he said. "But I don't feel anything yet."

"This stuff is pretty mellow," I said. "This stuff is mild. It's dope you can reason with. It doesn't mess you up."

"Not much it doesn't, bub," he said, and laughed.

My wife sat on the sofa between the blind man and me. I passed her the number. She took it and inhaled and then passed it back to me. "Which way is this going?" she said. Then she said, "I shouldn't be smoking this. I can hardly keep my eyes open as it is. That dinner did me in. I shouldn't have eaten so much."

"It was the strawberry pie," the blind man said. "That's what did it," he said, and he laughed his big laugh. Then he shook his head.

"There's more strawberry pie," I said.

"Do you want some more, Robert?" my wife asked.

"Maybe in a little while," he said.

We gave our attention to the TV. My wife yawned again. She said, "Your bed is made up when you feel like going to bed, Robert. I know you must have had a long day. When you're ready to go to bed, say so." She pulled his arm. "Robert?"

He came to and said, "I've had a real nice time. This beats tapes, doesn't it?"

I said, "Coming at you," and I put the number between his fingers. He inhaled, held the smoke, and then let it go. It was like he'd been doing it since he was nine years old.

"Thanks, bub," he said. "But I think this is all for me. I think I'm beginning to feel it," he said. He held the burning roach out for my wife.

"Same here," she said. "Ditto. Me too." She took the roach and passed it to me. "I may just sit here for a while between you two guys with my eyes closed. But don't let me bother you, okay? Either one of you. If it bothers you, say so. Otherwise, I may just sit here with my eyes closed until you're ready to go to bed," she said. "Your bed's made up, Robert, when you're ready. It's right next to our room at the top of the stairs. We'll show you up when you're ready. You wake me up now, you guys, if I fall

asleep." She said that and then she closed her eyes and went to sleep.

The news program ended. I got up and turned the channel. I sat back down on the sofa. I wished my wife hadn't pooped out. Her head lay across the back of the sofa, her mouth open. She'd turned so that her robe had slipped away from her legs, exposing a juicy thigh. I reached to draw her robe over the thigh, and it was then I glanced at the blind man. What the hell! I flipped the robe open again.

"You say when you want some strawberry pie," I said.

"I will," he said.

I said, "Are you tired? Do you want me to take you up to your bed? Are you ready to hit the hay?"

"Not yet," he said. "No, I'll stay up with you, bub. If that's all right. I'll stay up until you're ready to turn in. We haven't had a chance to talk. Know what I mean? I feel like me and her monopolized the evening." He lifted his beard and he let it fall. He picked up his cigarettes and his lighter.

"That's all right," I said. Then I said, "I'm glad for the company." And I guess I was. Every night I smoked dope and stayed up as long as I could before I fell asleep. My wife and I hardly ever went to bed at the same time. When I did go to sleep, I had these dreams. Sometimes I'd wake up from one of them, the heart going crazy.

SOMETHING ABOUT THE CHURCH AND THE MIDDLE AGES, narrated by an Englishman, was on the TV. Not your run-of-the-mill TV fare. I wanted to watch something else. I turned to the other channels. But there was nothing on them, either. So I turned back to the first channel and apologized.

"Bub, it's all right," he said. "It's fine with me. Whatever you want to watch is okay. I'm always learning something. Learning never ends. It won't hurt me to learn something tonight. I got ears," he said.

We didn't say anything for a time. He was leaning forward with his head turned at me, while his right ear was aimed in the direction of the set. Very disconcerting. Now and then his eyelids drooped and then they snapped open again. Now and then he put his fingers into his beard and tugged, as if thinking about something he was hearing on the television.

On the screen a group of men wearing cowls was being set upon and tormented by men dressed in skeleton costumes and men dressed as devils. The men dressed as devils wore devil masks, horns, and long tails. This pageant was part of a procession. The Englishman said it all took place in Málaga, Spain, once a year. I tried to explain to the blind man what was happening.

"Skeletons," he said. "I know about skeletons," he said, and he nodded.

The TV showed Chartres Cathedral. Then there was a

long slow look at Sainte Chapelle. Finally the picture switched to Notre Dame, with its flying buttresses, its spires reaching toward clouds. The camera pulled away to show the whole of the cathedral rising above the skyline.

There were times when the Englishman who was telling the thing would shut up, would simply let the camera move around over the cathedrals. Or else the camera would tour the countryside, men in fields walking behind oxen. I waited as long as I could. Then I felt I had to say something. I said, "They're showing the outside of this cathedral now. Gargoyles. Little statues carved to look like monsters. Now I guess they're in Italy. Yeah, they're in Italy. There's fresco paintings on the walls of this one church."

"What's fresco painting, bub?" he asked, and he sipped from his drink.

I reached for my glass. But it was empty. I tried to remember what I could remember about frescoes. "You're asking me what are frescoes?" I said. "That's a good question. I don't know."

The camera moved to a cathedral outside Lisbon, Portugal. The differences in the Portuguese cathedral compared with the French and Italian were not that great. But they were there. Mostly the interior stuff. Then something occurred to me and I said, "Something has occurred to me. Do you have an idea what a cathedral is? What they look like, that is? Do you follow me? If somebody says *cathedral* to you, do you have any notion what they're talking about? Do you know the difference between that and a Baptist church, say? Or that and a mosque, or synagogue?"

He let the smoke issue from his mouth. "I know they took hundreds of workers fifty or a hundred years to build," he said. "I just heard the man say that, of course. I know generations of the same families worked on a cathedral. I heard him say that, too. The men who began their life's work on them, they never lived to see the completion of their work. In that wise, bub, they're no different from the rest of us, right?" He laughed. Then his eyelids drooped again. His head nodded. He seemed to be snoozing. Maybe he was imagining himself in Portugal. The TV was showing another cathedral now. This one was in Germany. The Englishman's voice droned on. "Cathedrals," the blind man said. He sat up and rolled his head back and forth. "If you want the truth, bub, that's about all I know. What I just said. What I heard him say. But maybe you could describe one to me? I wish you'd do it. I'd like that. If you want to know, I really don't have a good idea."

I stared hard at the shot of the cathedral on the TV. It held a minute. Then it was gone, and the view was of the inside with rows of benches and high windows. How could I even begin to describe it? But say my life depended on it. Say my life was being threatened by an insane Turkish bey.

They took the camera outside again. I stared some more at the cathedral before the picture flipped off into the countryside. There was no use. I turned to the blind man and said, "To begin with, they're very tall. Very, very tall." I was looking around the room for clues. I tried again. "They reach way up. Up and up. Toward the sky. They soar. They're like poetry, that's what they're like. They're so big, some of them, they have to have these supports. To help hold them up, so to speak. These supports are called buttresses. They remind me of viaducts for some reason. But maybe you don't know viaducts, either? Sometimes the cathedrals have devils and such carved into the front. Sometimes great lords and ladies. Don't ask me why this is," I said. He was nodding. The whole upper part of his body seemed to be moving back and forth. "I'm not doing so good, am I?" I said.

He stopped nodding and leaned forward on the edge of the sofa. As he listened to me, he was running his fingers through his beard. I wasn't getting through to him though, I could see that. But he waited for me to go on just the same. He nodded, as if trying to encourage me. I tried to think what else I could say. "They're really big. They're massive. They're built of stone. Marble, too, sometimes. In those old days, when they built cathedrals, men aspired to be close to God. In those days God was an important part of everyone's life. This was reflected in their cathedral-building. I'm sorry," I said, "but it looks like that's the best I can do for you. I'm just no good at it."

"That's all right, bub," he said. "Hey, listen. I hope you don't mind my asking you. Can I ask you something? Let me ask you a simple question, yes or no. I'm just curious and there's no offense. You're my host. But let me ask if you are in any way religious? You don't mind my asking?"

I shook my head. He couldn't see that, though. A wink is the same as a nod to a blind man. "I guess I'm agnostic or something. No, the fact is, I don't believe in it. Anything. Sometimes it's hard. You know what I'm saying?"

"Sure, I do," he said.

"Right," I said.

The Englishman was still holding forth. My wife sighed in her sleep. She drew a long breath and continued with her sleep.

"You'll have to forgive me," I said. "But I can't tell you what a cathedral looks like. It just isn't in me to do it. I can't do any more than I've done." The blind man sat very still, his head down, as he listened to me. "The truth is, cathedrals don't mean anything special to me. Nothing. Cathedrals. They're something to look at on late-night TV. That's all they are."

It was then he cleared his throat. He brought something up. He took a handkerchief from his back pocket. In a minute he said, "I get it, bub. It's okay. It happens. Don't worry about it," he said. "Hey, listen to me. Will

you do me a favor? I got an idea. Why don't you find us some heavy paper? And a pen. We'll do something. An experiment. Sure, you can do it. You can. We'll draw one together. Get us a pen and some heavy paper. Go on, bub, get the stuff," he said.

SO I WENT UPSTAIRS. MY LEGS FELT LIKE THEY DIDN'T have any strength in them. They felt like they did sometimes after I'd run a couple miles. In my wife's room I looked around. I found some ballpoints in a little basket on her table. And then I tried to think where to look for the kind of paper he was talking about.

Downstairs, in the kitchen, I found a shopping bag with onion skins in the bottom of the bag. I emptied the bag and shook it. I brought it into the living room and sat down with it near his legs. I moved some things, smoothed the wrinkles from the bag, spread it out on the coffee table. The blind man got down from the sofa and sat next to me on the carpet.

He ran his fingers over the paper. He went up and down the sides of the paper and the edges, top and bottom. He fingered the corners. "All right," he said. "All right. Let's do her."

He found my hand, the hand with the pen. He closed his hand over my hand. "Go ahead, bub, draw," he said. "Draw. You'll see. I'll follow along with you. It'll be all right. Just begin now, like I'm telling you. You'll see. Draw," he said.

So I began. First I drew a box that resembled a house. It could have been the house I lived in. Then I put a roof on the house. At either end of the roof I drew spires. Crazy.

"Swell," he said. "Terrific. You're doing fine," he said. "Never thought anything like this could happen in your lifetime, did you? Well, it's a strange life, bub, we all know that. Go on now. Keep it up."

I put in windows with arches. I drew flying buttresses. I hung great doors. I couldn't stop. The TV station went off the air. I put down the pen and closed and opened my

fingers. The blind man felt around over the paper. He moved the tips of his fingers slowly over the paper, over what I'd drawn, and he nodded. "Doing fine," he said.

I took up the pen, and he found my hand once more. I kept at it. I'm no artist. But I kept drawing just the same.

My wife opened her eyes and gazed at us. She sat up on the sofa, her robe hanging open. She said, "What are you doing? What in the world are you doing?"

I didn't answer her. The blind man said, "We're drawing a cathedral, dear. Me and him are working on something important. Press hard now," he said to me. "That's right. That's good," he said. "Sure. You got it, bub. I can tell. You didn't think you could. But you can, can't you? You're cooking with Crisco now. You'll see. Know what I'm saying? We're going to have us something here in a minute. How's the old arm?" he said. "Put some people in there now. What's a church without people, bub?"

"What's going on?" my wife said. "Robert, what are you doing? What's going on?"

"It's all right," he said to her. "Close your eyes now, bub," he said.

I did that. I closed them just like he said.

"Are they closed?" he said. "Don't fudge."

"They're closed," I said.

"Keep them that way," he said. He said, "Don't stop now."

So we kept on with it. His fin-

gers rode my fingers as my hand went over the rough paper. It was like nothing else in my life up to now.

In a minute he said, "I think that's enough. I think you got the idea," he said. "Take a look. What do you think?"

But I had my eyes closed. I thought I'd keep them closed a little longer. I thought it was something I ought not to forget.

"Well?" he said. "Are you looking?"

My eyes were still closed. I was in my house and I knew that. But I didn't feel inside anything.

"It's really something," I said. □



THE KINGDOM OF AUSCHWITZ

BY OTTO FRIEDRICH

IN A REMOTE CORNER OF SOUTHERN POLAND, IN A marshy valley where the Sola River flows into the Vistula about thirty miles west of Kraków, Heinrich Himmler decided in the spring of 1940 to build a new prison camp. The site chosen by some of his underlings had little to recommend it. Outside a bleak little town named Oświęcim, there stood an abandoned Austrian artillery barracks, a collection of about twenty single-story brick buildings, most of them dark and dirty. The surrounding countryside, in the foothills of the Carpathians, was beautiful, a mosaic of meadows speckled with wild flowers, but a committee of Himmler's adjutants reported back to Berlin that the prospects for a large prison camp were forbidding. The water supply was polluted, there were mosquitoes everywhere, and the barracks themselves were virtually useless.

Himmler was undaunted. In this first year of the subjugation of Poland, the need for new detention camps to

help establish German law and order in the east was overwhelming. One of Himmler's most dedicated subordinates, SS Major Rudolf Hoess, commandant of the "protective custody camp" at Sachsenhausen, disagreed with his skeptical colleagues. He reported to Berlin that hard work could transform the marshes along the Vistula into a valuable outpost of the Reich. The place had two important qualities: it had good railroad connections, but it was isolated from outside observation. Himmler promptly assigned Hoess to take charge of the project. On April 29, 1940, Hoess and five other SS officers from Sachsenhausen descended from the Breslau train and surveyed the prospect before them. "It was far away, in the back of beyond, in Poland," Hoess later recalled, in the memoir that he wrote shortly before he was hanged in 1947. The Germans had their own name for the place: Auschwitz.

Hoess was a remarkable man, as anyone who confesses



to personal responsibility for the death of more than 2.5 million people presumably must be. (Nobody knows, even to the nearest hundred thousand, how many people died at Auschwitz. Hoess said in his memoir that he got the figure of 2.5 million from Adolf Eichmann, but he said that it seemed to him "far too high." Scholarly estimates range from 1 to 4 million.) It was Hoess, apparently, who devised the famous iron sign that mockingly welcomed the trainloads of prisoners to Auschwitz: *Arbeit Macht Frei*. "Work makes you free." He seems not to have intended it as a mockery, nor even to have intended it literally—a false promise that those who worked to exhaustion would eventually be released—but, rather, as a kind of mystical declaration that self-sacrifice in the form of endless labor does in itself bring a kind of spiritual freedom. "All my life I have thoroughly enjoyed working," Hoess wrote on the eve of his hanging. "I have done plenty of hard, physical work, under the severest conditions, in the coal mines, in oil refineries, and in brickyards. . . . Work in prison [is] a means of training for those prisoners who are fundamentally unstable and who need to learn the meaning of endurance and perseverance."

He was not a mere brute. One of the few surviving photographs shows a man with a high forehead, large, searching eyes, a full-lipped and rather prissy mouth. His devout parents had been determined that he should become a priest. His father and his grandfather had been

soldiers, and though the father retired from the army to become a salesman in Baden-Baden, he passed on to his only son his belief in military discipline. And piety: he took his son on pilgrimages to shrines as far away as Einsiedeln and Lourdes. "I was taught," Hoess wrote, "that my highest duty was to help those in need. It was constantly impressed on me in forceful terms that I must obey promptly the wishes and commands of my parents, teachers, and priests."

Such commands sometimes conflicted. Shortly after Hoess's father died, World War I broke out, and despite his mother's pleadings that he continue his studies, he lied about his age and managed to enlist at sixteen in the 21st Regiment of Dragoons. He was sent to Turkey, then to the Iraqi front, then to Palestine. At eighteen, he was already the commander of a cavalry unit. When the war ended, he refused to surrender and marched his troops home through Turkey, Bulgaria, and Rumania to Austria. He found his mother dead, his household dispersed. He took up arms again in one of the Freikorps units that fought in the Baltic states, and when the Freikorps became violently involved in the domestic battles of the Weimar Republic, Hoess took part in an absurd political murder. He and a band of his comrades got drunk and beat to death a schoolteacher whom they falsely suspected of having informed on another nationalist.

Hoess was surprised to find himself arrested, prosecuted, and sentenced to life imprisonment. He had night-



mares in prison of "always being pursued and killed, or falling over a precipice."

Freed by an amnesty after five years, Hoess passionately wanted to become a farmer. He discovered a right-wing group called the League of Artamanen, which was establishing a network of agricultural communes. He found a girl who shared his views, and they got married and worked the land and had three children (there were ultimately to be five). One of the leaders of the Artamanen was Heinrich Himmler, scarcely thirty, a thoughtful young man who wore pince-nez, loved birds and flowers, held a degree in agronomy, and owned a chicken farm outside Munich. With the rise to power of Hitler, Himmler became the commander of the Führer's private guard—the Schutzstaffeln, or SS—and when Himmler called for recruits, Hoess answered the call. He claims to have had "many doubts and hesitations" about leaving the farm, claims to have known almost nothing about the concentration camps that Hitler was building. "To me it was just a question of being an active soldier again, of resuming my military career," he wrote. "I went to Dachau."

Hoess's memoirs provide a remarkable illustration of the process of self-delusion. Having joined the SS for a quasi-military career, Hoess seems to have been surprised and strangely thrilled, at Dachau, the first time he saw a prisoner flogged. "When the man began to scream," he recalled, "I went hot and cold all over. . . . I am unable to give an explanation of this." Hoess dutifully regarded the prisoners as enemies of the state, regarded their forced labor as a justified punishment, regarded all the beatings and torments as a proper enforcement of discipline. He claims, nonetheless, to have had misgivings, and to have suppressed them. "I should have gone to [Himmler] and explained that I was not suited to concentration camp service, because I felt too much sympathy for the prisoners. I was unable to find the courage to do this. . . . I did not wish to reveal my weakness. . . . I became reconciled to my lot."

Hoess worked hard, enforced orders, won promotions, first at Dachau, then at Sachsenhausen. Then came the war, and the lightning conquest of Poland. Himmler, who by now gloried in the title of Reichsführer SS, recognized Hoess's extraordinary dedication and ordered him to create the first concentration camp beyond the original frontiers of the Reich. Hoess sensed from the start that he was being assigned to a project of unprecedented dimensions. At the outbreak of the war, there had been six concentration camps in Germany, containing about 25,000 prisoners. The first was Dachau, just northwest of Munich, built in the spring of 1933, Hitler's first year. The others were Buchenwald, near Weimar; Sachsenhausen, north of Berlin; Mauthausen, near Linz; Flossenbürg, in the Sudetenland, and Ravensbrück, the women's

Otto Friedrich, a senior writer for Time magazine, is at work on a book, The End of the World. His account of Auschwitz is based primarily on books written by survivors.

prison, also north of Berlin. Himmler told Hoess that he was to build, in the valley of the Vistula, a camp for 10,000 prisoners, and that would be only the beginning. There might someday be 50,000 prisoners, or even more.

At Auschwitz, however, there was no camp, only a few dilapidated barracks and stables. On May 20, 1940, a month after Hoess's arrival, an SS officer named Gerhard Pallitzsch, who held the title of Rapportführer, and thus was responsible for camp discipline, brought to Hoess thirty German criminals whom he had selected from Sachsenhausen. These thirty men were to start the building of the camp, and Pallitzsch had chosen them partly for their various technical skills. They were also destined to become the camp's first "kapos," or trustees, the men who carried out the orders of the SS and thus became not only the Nazis' representatives but in some cases the worst of oppressors.

The town council of Oświęcim cooperated by ordering a roundup of 200 local Jews and assigning them to start work on the new camp. The SS office in Kraków sent fifteen cavalymen to guard the prisoners as they worked. The project had barely begun when the police headquarters in Breslau sent a message to ask when the camp would be ready to take in prisoners. Before the message had even been answered, a passenger train arrived with 728 Polish political prisoners. The date was June 14, 1940. Most of these first prisoners were young men who had been caught trying to escape across the border into Hungary. There were also a few priests and schoolteachers and Jews. They were assigned to some buildings near the camp that had formerly belonged to the Polish Tobacco Monopoly and then ordered to join in the building of the camp.

THE FIRST SNOW FELL IN EARLY OCTOBER, AND ICY mists from the Vistula seeped through the unfinished barracks at Auschwitz. SS men with clubs drove the half-starved prisoners to work. Yet Hoess nourished grand plans to make his camp a kind of Utopia. As early as January of 1941, he decided to organize an Auschwitz symphony orchestra. Himmler, the former chicken farmer, indulged in similarly benign fantasies about his outpost on the Vistula. "Auschwitz was to become the agricultural research station for the eastern territories," Hoess recalled Himmler saying at a meeting in Berlin. "Opportunities were opened up to us, which we had never before had in Germany. Sufficient labor was available. All essential agricultural research must be carried out there. Huge laboratories and plant nurseries were to be set out. All kinds of stock-breeding was to be pursued there."

Sufficient labor was available. In that one sentence, that euphemism for the herds of emaciated prisoners in their tattered blue and white stripes, Hoess illuminated the most seductive element of Auschwitz in its first

phase. It had been founded as a detention camp, a place to confine undesirable people—Polish army officers, dissidents and heretics of all sorts, people who had to be prevented from infecting the new order that the Nazis were trying to build in the disorganized east. But once these thousands of people were stripped of their possessions and confined behind barbed wire, they represented a resource that Himmler was just beginning to appreciate: labor. That basic unit of human value was now available for any use to which the Reichsführer SS might choose to put it, whether an agricultural research laboratory or a symphony orchestra or an armaments factory. “In Auschwitz,” Hoess observed, “everything was possible.”

Though the “sufficient labor” at Auschwitz could never really be sufficient for Himmler’s fantasies, his primary imperative was to protect and enlarge this new resource. When he paid his first visit to the year-old camp on March 1, 1941, he told Hoess that the facilities he was building were to contain not 10,000 or 50,000 prisoners, as previously agreed, but 100,000. In fact, Auschwitz was too small. A new camp, Auschwitz II, would have to be built in the birch woods outside what had once been the village of Brzezinka, two miles west of Auschwitz. The Germans called it Birkenau. This expansion was not mere SS imperialism, Himmler told Hoess, but a contribution to the war effort. He had brought with him several executives of I. G. Farben, the great chemical cartel, which was proposing to build a synthetic rubber factory near Auschwitz in order to use the prisoners to make truck tires for the victorious Wehrmacht.

Hoess was appalled, not by the vastness of Himmler’s plans but by the lack of means to carry them out. He had been officially warned in advance against reporting anything “disagreeable” to Himmler, but he could not refrain from an outpouring of bureaucratic protest. Auschwitz was already overcrowded by the trainloads of prisoners that kept rolling in, and there were no materials with which to build a new camp at Birkenau. The whole region lacked sufficient fresh water and drainage. There was a serious danger of disease. Himmler was unmoved. He told Hoess: “I do not appreciate the difficulties in Auschwitz. It is up to you to manage somehow.”

Hoess did manage. I. G. Farben began building its synthetic rubber factory in April in the nearby town of Dwory, and gangs of prisoners trudged there every morning to play their part in the war effort, but that summer changed the whole nature of the war, and therefore of the camp at Auschwitz. On the night of June 22, one of the prisoners first heard on an illicit radio that Hitler’s Panzer divisions were streaming across the Russian frontier. For a few days, the prisoners were jubilant, for they thought that the widened war and the new alliance among Hitler’s enemies would inevitably lead to their liberation. But as the Wehrmacht swept across western Russia, the prisoners saw their future darken. Then came the first Russian captives, thousands and thousands of

them. “They had been given hardly any food on the march,” Hoess wrote, “being simply turned out into the nearest fields during halts on the way and there told to ‘graze’ like cattle on anything edible they could find. In the Lamsdorf camp there must have been about 200,000 Russian prisoners of war. . . . Most of them huddled as best they could in earth hovels they had built themselves. . . . It was with these prisoners, many of whom could hardly stand, that I was now supposed to build the Birkenau prisoner-of-war camp.”

Hoess ascribed the Russians’ fate to their own weakness, or to a larger destiny. “They died like flies from general physical exhaustion,” he recalled, “or from the most trifling maladies which their debilitated constitutions could no longer resist. I saw countless Russians die while in the act of swallowing root vegetables or potatoes. . . . Overcome by the crudest instinct of self-preservation, they came to care nothing for one another, and in their selfishness now thought only of themselves. Cases of cannibalism were not rare in Birkenau. I myself came across a Russian lying between piles of bricks, whose body had been ripped open and the liver removed. They would beat each other to death for food. . . . They were no longer human beings.”

Hoess seems to have persuaded himself that this process occurred all by itself, but one of his subordinates, Pery Broad, an SS man of Brazilian parentage, wrote out for the trial of twenty-two Auschwitz officials in Frankfurt in 1964 a vivid account of how the Russians were finally dispatched. “Thousands of prisoners of war were shot in a copse near Birkenau and buried in mass graves,” Broad recalled. “The graves were about 150–200 feet long, 15 feet deep, and perhaps just as wide. The camp administration had solved the Russian problem to its satisfaction. Then . . . the fisheries began to complain that the fish in the ponds in the vicinity of Birkenau were dying. Experts said this was due to the pollution of the ground water through cadaveric poisoning. But that was not all. The summer sun was beating down on Birkenau, the bodies, which had not yet decomposed but had only rotted, started to swell up, and a dark red mass began to seep through the cracks of the earth, spreading an indescribable stench throughout. Something had to be done quickly. . . . SS Sergeant Franz Hössler was ordered to dig up the bodies in all possible secrecy and have them burned.” Of the 12,000 Russians sent to build Birkenau in the fall of 1941, only about 150 were still alive the following summer. “Those who did remain were the best,” said Hoess. “They were splendid workers.”

WHILE THE AUTHORITIES AT AUSCHWITZ WERE KILLING Russians, the authorities in Berlin were making new plans. In the summer of 1941—the exact date is unknown—Himmler summoned Hoess to Berlin for a secret meeting. Not even Himmler’s adjutant



was present. "The Führer has ordered that the Jewish question be solved once and for all," Himmler said, according to Hoess, "and that we, the SS, are to implement that order." Himmler had considered using various camps in the east, he said, and only Auschwitz would serve as the center of destruction, only Auschwitz was sufficiently big, sufficiently isolated, sufficiently organized, to carry out Himmler's plan. "I have now decided to entrust this task to you," Himmler said. "It is difficult and onerous and calls for complete devotion, notwithstanding the difficulties that may arise. . . . You will treat this order as absolutely secret, even from your superiors. . . . The Jews are the sworn enemies of the German people and must be eradicated. Every Jew that we can lay our hands on is to be destroyed now during the war, without exception."

Hoess, the onetime pilgrim to Lourdes, seems to have reached such a state of official docility by then that he did not even question this incredible order, much less dispute it. The only question in his mind, apparently, was how such a gigantic enterprise could be carried out. And since no official record of Himmler's order was kept, it is only by sifting through the surviving memoirs and trial testimony of both the SS officials and their victims that we can piece together the story of what Auschwitz was. Himmler did not explain his orders. He said he would send Hoess an emissary, Major Adolf Eichmann, head of Section B-4 of Bureau IV of the Reich Security Office

(RSHA), to discuss the details. Shortly afterward, Eichmann arrived in Auschwitz—a lean, wiry man with a sharp nose and a nervous manner. He and Hoess seemed to recognize something in each other that made them friends. Eichmann already had a plan, a geographic sequence for the shipment of Jews to Auschwitz: first those from the eastern part of Upper Silesia, then those from the neighboring Polish areas now under German rule, then those from Czechoslovakia, then a great sweep of western Europe.

But the two officials seemed unable to decide on the most fundamental question: how to kill the victims. The first *Einsatzgruppen* (special action groups) that had prowled through eastern Europe in the wake of the advancing German army had simply shot any Jews they had found, but this was an inefficient way of carrying out mass executions. It was expensive. It was also bad for the morale of the executioners. This may seem a minor aspect of the problem, but the Germans gave it a certain amount of consideration. "It would have placed too heavy a burden on the SS men who had to carry it out," said Hoess, "especially because of the women and children among the victims."

Eichmann and Hoess agreed that poison gas was the solution, but the technology of gassing was only beginning to be explored. As early as 1939, the Nazis had started a series of experiments on the most feared and despised of all minorities, the mentally defective and the

insane. In a dozen mental institutions in various parts of Germany, the Nazis built fake shower rooms into which they could pipe carbon monoxide. Over the course of a year or more, they killed about 50,000 mental patients in this way, but the technique was generally regarded as unsatisfactory. There were constant breakdowns in the gassing machinery, and the disposal of the corpses caused unpleasant rumors in the surrounding towns.

There were also economic problems in applying such techniques on the grand scale envisaged at Auschwitz. Carbon monoxide sprays "would necessitate too many buildings," as Hoess put it, "and it was also very doubtful whether the supply of gas for such a vast number of people would be available." The question was left open. Eichmann told Hoess that he would try to find a poisonous gas that was both cheap and plentiful, and then they would meet again. In the meantime, they strolled together through the idle farmlands that had been expropriated in the village of Brzezinka. They were looking for a place where the gas, once it was found, might be applied. They finally saw an abandoned farmhouse that they considered, as Hoess said, "most suitable." It was near the northern corner of the still-expanding camp. "It was isolated and screened by woods and hedges," Hoess wrote, "and it was also not far from the railroad. The bodies could be placed in the long deep pits in the nearby meadows. . . . We calculated that after gas-proofing the premises then available, it would be possible to kill about 800 people simultaneously with a suitable gas."

THE SEARCH FOR A SUITABLE GAS TOOK HOESS TO the other death camps that were now being built. There were five smaller ones put into operation in Poland between December of 1941 and the middle of 1942: Chelmno (Kulmhof), Belzec, Sobibór, Majdanek, and Treblinka. At Chelmno, about 150 miles north of Auschwitz, the inhabitants of the Łódź ghetto were herded into a crumbling chateau known as "the palace," then loaded onto trucks that had been specially equipped so that the exhaust fumes could be piped up into the backs of the trucks. By the time the trucks arrived at a burial ground in the surrounding forest, the prisoners in the back were dead.

This system had its flaws, however. The trucks could not handle large numbers of prisoners, and the gas from the exhaust pipes flowed in so unevenly that some of the victims were still gasping with life when the trucks reached the burial ground. Hoess moved on to Treblinka, near Bialystok, where the plan was to park the trucks outside three small gas chambers, each about fifteen feet square, and to pipe the exhaust fumes in among the prisoners assembled there. Hoess was still dissatisfied. All these methods were too unreliable, too small in scale.

Hoess apparently was not then aware, nor was Eichmann, that the suitable gas was already available. It was

called Zyklon B, a commercial form of hydrocyanic acid, which became active on contact with air. (The term "Zyklon" comes from the first letters of the German names for the three main ingredients, cyanide, chlorine, and nitrogen.) It was manufactured by a firm called Degesch, which was largely owned by I. G. Farben, and it had been brought to Auschwitz in the summer of 1941 as a vermin-killer and disinfectant. It was very dangerous. Two civilians came from Hamburg with their gas masks to show the Auschwitz authorities how to use the poison. Prisoners who worked in the munitions plant had to hang up their vermin-infested clothes; then the barracks were sealed, and the gas containers were pried open.

On September 3, 1941, while Hoess was away on business, Deputy Commandant Karl Fritzsche decided, apparently on his own authority, to experiment in using Zyklon B on 600 Russian prisoners of war and 250 tubercular patients in the Auschwitz hospital. He sealed up some of the underground bunkers of Block 11, headquarters of the Gestapo's Politische Abteilung, or "political department." There he packed in the prisoners, then put on a gas mask and flung one of the disinfectant containers into the midst of the victims. Within a few minutes, they were all dead. "Those who were propped against the door leaned with a curious stiffness and then fell right at our feet, striking their faces hard against the concrete floor," recalled a Pole named Zenon Rozanski, who served in the penal detail assigned to clear out the bunker. "Corpses! Corpses standing bolt upright and filling the entire corridor of the bunker, till they were packed so tight it was impossible for more to fall."

The Final Solution lurched into existence. It was perfectly clear in Himmler's meeting with Hoess in the summer of 1941, but there were endless details to be worked out, regulations to be drafted and distributed, meetings and elaborations. The most important of these was the secret Wannsee conference convened in January, 1942, by Himmler's alter ego, Reinhard Heydrich, at a villa in the beautiful lakeside suburb on the southwestern edge of Berlin. Lunch and drinks were served. There were thirteen officials representing the Foreign Office, the Ministry of Justice, the Polish occupation authorities, and all the main departments of the German government and the Nazi party. Heydrich spoke at length of "the coming final solution of the Jewish question." Everything was explained. Eichmann kept the minutes.

Yet there were still further delays. It was not until August 3, 1942, that the working plans for the four great crematoria at Birkenau, which could take in as many as 10,000 prisoners a day, were approved by the Auschwitz authorities and the engineers at Toepf A.G. in Erfurt. In January and February of 1943, there were still complaints of work delayed by freezing weather, and not until March 13 was Crematorium II finally ready to operate. Until then, as Himmler had ordered, it was up to Hoess "to manage somehow." Hoess managed with the

farmhouse that he and Eichmann had discovered. There and in an abandoned barn, about 300 prisoners a day could be gassed. Hundreds more were killed by lethal injections of phenol, or by simple shooting. Throughout the confusions of 1942, the impossible orders kept pouring in, and Hoess kept improvising. "I cannot say," he wrote in his memoir, "on what date the extermination of the Jews began."

The first Transport Juden, consisting of 999 Jewish women from Slovakia, arrived on March 26, 1942, at the Auschwitz railroad station. "A cheerful little station," as a prisoner named Tadeusz Borowski later wrote, "very much like any other provincial railway stop: a small square framed by tall chestnuts and paved with yellow gravel." Since the Birkenau gas chambers had not yet been built, the women were stripped, their heads were shaved, and they were confined in Blocks 1 to 10 of the main camp, separated by a high fence from the men's barracks. They were made to stand for hours at roll call, and beaten, and then sent out in work gangs, and beaten again.

At the little station with the chestnut trees, the trains kept arriving. On April 17, 1942, a shipment of 973 Slovakian Jews appeared at Auschwitz, and on April 19, another 464. The SS men and their snarling guard dogs met them at the railroad ramp. Prisoner Borowski, who was a poet of incandescent talent, appeared at the ramp occasionally to watch the arrivals. (Borowski survived three years in Auschwitz. Three collections of his stories and a volume of poetry were published after the war. He committed suicide in 1951 at the age of twenty-nine.) "The ramp has become increasingly alive with activity, increasingly noisy," he wrote. "The crews are being divided into those who will open and unload the arriving cattle cars and those who will be posted by the wooden steps. . . . Motorcycles drive up, delivering SS officers, bemedaled, glittering with brass, beefy men with highly polished boots and shiny, brutal faces. Some have brought their briefcases, others hold thin, flexible whips. . . . Some stroll majestically on the ramp, the silver squares on their collars glitter, the gravel crunches under their boots, their bamboo whips snap impatiently. . . . The train rolls slowly alongside the ramp. In the tiny barred windows appear pale, wilted, exhausted human faces, terror-stricken women with tangled hair, unshaven men. They gaze at the station in silence. And then, suddenly, there is a stir inside the cars, and a pounding against the wooden boards. 'Water! Air!'"

The SS men routed the starving and terrified prisoners out of the freight cars, ordered them to abandon all their possessions, and then whipped them into line to prepare for the process known as "selection." Two SS doctors had been assigned by rotation to choose a few of the hardest prisoners to be preserved for the Auschwitz labor commands. These doctors (the most notable was Josef Mengele, now a fugitive in Paraguay, who liked to wear white

gloves and to whistle themes from Wagner's operas as he worked) surveyed each newcomer for a few seconds and then waved him on in one direction or another. A wave to the left—though most of the newcomers did not realize it—meant survival, an assignment to hard labor in the construction gangs. A wave to the right meant the gas chamber. Anyone more than about forty years of age was waved to the right. Most women went to the right. Almost all children under fifteen went to the right. Families that asked to stay together were reunited and sent to the right. Only about 10 percent of each transport, on the average, went to the left—sometimes more, sometimes less, according to the whim of the SS doctors.

The May 12 transport that brought 1,500 Jews from Sosnowiec marked a turning point in the short history of Auschwitz, for this was the first trainload of Jews who were not imprisoned, not shorn, not sent out in work gangs, not beaten or shot. This time, there was no selection on the ramp at the railroad station, no division of families, no separation of those who were fit to work from the old and the sick and the children. These 1,500 Jews from Sosnowiec were the first to be sent directly to the gas chambers—all of them. And with that, Auschwitz finally became what it had always been destined to become: not just a prisoner-of-war camp, not just a slave-labor camp, but a *Vernichtungslager*, an "extermination camp." *Vernichtung* means more than that. It means to make something into nothing. Annihilation.

That summer of 1942, the trains to Auschwitz began bringing the Jews from France, Belgium, Holland, and Croatia. In November came the Jews of Norway. In March of 1943, when the great crematoria finally began operating, came the first of the Jews of Greece, from Macedonia and Thrace. That same spring, after the destruction of the rebellious Warsaw ghetto, the SS began the systematic liquidation of all the remaining Polish ghettos. Lwów was one of the first, then Bialystok. In September, the ghettos of Minsk and Vilna were destroyed. In October, Auschwitz received the Jews of southern France and Rome; in December, the Jews of northern Italy; then, early in 1944, the Jews of Athens. "What for Hitler . . . was among the war's main objectives . . . and what for Eichmann was a job . . .," Hannah Arendt wrote in *Eichmann in Jerusalem*, "was for the Jews quite literally the end of the world."

DESPITE THE ANNIHILATION OF THE 1,500 JEWS FROM Sosnowiec, the selections on the ramp continued, for there was never a consistent policy on anything at Auschwitz, not even on killing. The basic orders from Berlin were completely contradictory. Eichmann and his cohorts at police headquarters—the RSHA—continually demanded more killings, but the SS administrative offices—the WVHA—demanded just as adamantly that the prisoners be made to work for the war effort. So

the Auschwitz authorities carried out their orders, murdering or sparing their victims, by a strange mixture of bureaucracy and impulse. "We were all tormented by secret doubts," said Hoess, "[but] I myself dared not admit to such doubts. . . . Often at night, I would walk through the stables and seek relief among my beloved animals."

Some people made their own ways. Even at Auschwitz, Dr. Ella Lingens, a prisoner, recalled at the Frankfurt trial, there was one "island of peace"—at the Babice subcamp, because of an officer named Flacke. "How he did it, I don't know," she testified. "His camp was clean and the food also." The Frankfurt judge, who had heard endless protestations that orders had to be obeyed, was amazed.

"Do you wish to say," he asked, "that everyone could decide for himself to be either good or evil in Auschwitz?"

"That is exactly what I wish to say," she answered.

Auschwitz was a society of extraordinary complexity. It had its own soccer stadium, its own library, its own photographic lab, and its own symphony orchestra. It had its own Polish nationalist underground and its own Polish Communist underground—not to mention separate Russian, Slovakian, French, and Austrian resistance groups—whose members fought and sometimes killed each other. It also had its underground religious services, Catholic, Protestant, and Jewish. There was no reason that a death camp should have a hospital at all, and yet the one at Auschwitz grew to considerable size, with about sixty doctors and more than 300 nurses. It had a surgical department and an operating theater, and special sections for infectious diseases, internal injuries, and dentistry. Auschwitz even had its own brothel, known as "the puff," which favored prisoners could enter by earning chits for good behavior. Crafty veterans of the camp would gather at the office where the chits were handed out, and if any model prisoner failed to claim his due, one of the old-timers would quickly step forward to claim it for him.

"Concentration-camp existence . . . taught us that the whole world is really like a concentration camp," wrote Tadeusz Borowski. "The weak work for the strong, and if they have no strength or will to work—then let them steal, or let them die. . . . There is no crime that a man will not commit in order to save himself. And, having saved himself, he will commit crimes for increasingly trivial reasons; he will commit them first out of duty, then from habit, and finally—for pleasure. . . . The world is ruled by neither justice nor morality; crime is not punished nor virtue rewarded, one is forgotten as quickly as the other. The world is ruled by power."

The trip to Auschwitz served as a kind of initiation. The freight cars, each carrying about 100 people, came from as far as Bordeaux and Rome and Salonika, voyages of a week or more, stifling in summer, arctic in winter.

Sometimes the trains were shunted onto sidings for days on end, nights on end. The prisoners' cries for food and water went unheeded. When they banged their fists on the doors, their guards usually ignored them. Occasionally, they answered by banging the outsides of the doors with their gun butts. Sometimes, by the time the sealed trains finally reached southern Poland, the dead outnumbered the living. (The trip from Corfu took twenty-seven days in all, and when the train came to a stop, no survivors emerged.) To arrive at the unknown town of Auschwitz, then, seemed a kind of liberation.

"A huge, multicolored wave of people loaded down with luggage pours from the train," Borowski continued in his description of the scene on the ramp, "like a blind, mad river trying to find a new bed. But before they have a chance to recover, before they can draw a breath of fresh air and look at the sky, bundles are snatched from their hands, coats ripped off their backs, their purses and umbrellas taken away. . . . *Verboten!* one of us barks." The arrival on the ramp was a chaos of screams and shouts, barking guard dogs, pandemonium: the *Begrüßung* ("welcome"), the Nazis called it.

FEW PRISONERS PROTESTED THEIR TREATMENT. MOST were numb with shock and exhaustion and terror. In one instance, though, a woman saw that one of the SS guards was eyeing her, so she began flirting with him, then reached down and threw a handful of gravel in his face. That made him drop his pistol. The woman pounced on it and shot him several times in the abdomen before the other guards clubbed her to the ground. Sergeant Josef Schillinger lay face down on the ramp, dying, his fingers clawing in the gravel. "*O Gott, mein Gott,*" he groaned, "*was hab' ich getan dass ich so leiden muss?*" "Oh God, my God, what have I done that I must suffer so?"

Once the selection was finished, the prisoners chosen for the gas chambers were taken by truck to two neat little farmhouses, with thatched roofs and whitewashed walls, surrounded by fruit trees and shrubbery. Teams of Jewish prisoners who had been assigned to the Sonderkommando, or "special command," shepherded the victims onward, urging them to move along quietly into the shower rooms and to take off all their clothes.

Here, and later in the four new crematoria at Birkenau, the Final Solution took place. What happened can best be described in the detached words of Rudolf Hoess, who was in command of all this: "The door would now be quickly screwed up and the gas discharged by the waiting disinfectors through vents in the ceilings of the gas chambers, down a shaft that led to the floor. This insured the rapid distribution of the gas. It could be observed through the peephole in the door that those who were standing nearest to the induction vents were killed at once. It can be said that about one-third died straight away. The remainder staggered about and began to

scream and struggle for air. The screaming, however, soon changed to the death rattle and in a few minutes all lay still. . . . The door was opened half an hour after the induction of the gas, and the ventilation switched on. . . . The special detachment now set about removing the gold teeth and cutting the hair from the women. After this, the bodies were taken up by elevator and laid in front of the ovens, which had meanwhile been stoked up. Depending on the size of the bodies, up to three corpses could be put into one oven at the same time. The time required for cremation . . . took twenty minutes. As previously stated I and II could cremate about 2,000 bodies in twenty-four hours, but a higher number was not possible without causing damage to the installations."

There were some prisoners who cherished the idea that Hoess had somehow exceeded his orders and begun these massacres on his own, and that if the authorities in Berlin knew what was really happening, they would stop it. Such speculations ended with Heinrich Himmler's visits to Auschwitz in July, 1942, and January, 1943.

On his last trip, Himmler arrived at Auschwitz at 8 A.M., and by 8:45 one of the gas chambers was packed with victims so that the Reichsführer SS could watch a gassing at 9 o'clock sharp. At 8:55, however, a telephone rang, and the executioners learned that Himmler and Hoess were still having breakfast. "Inside the chamber itself," according to the recollections of a Czech prisoner named Rudolf Vrba, "frantic men and women, who knew by that time what a shower in Auschwitz meant, began shouting, screaming, and pounding weakly on the door. . . ." Nobody paid any attention. The SS men waited for orders. At 10 A.M., they were told to wait some more. At 11 A.M., an official car finally arrived, bringing Himmler and Hoess, who paused to chat with the senior officers present. Hoess invited Himmler to observe through a peephole the naked mass sealed inside the gas chamber. Himmler obliged. Then the gassing began. "Hoess courteously invited his guest to have another peep through the observation window," Vrba recalled. "For some minutes, Himmler peered into the death chamber, obviously impressed. . . . What he had seen seemed to have satisfied him and put him in good humor. Though he rarely smoked, he accepted a cigarette from an officer, and, as he puffed at it rather clumsily, he laughed and joked."

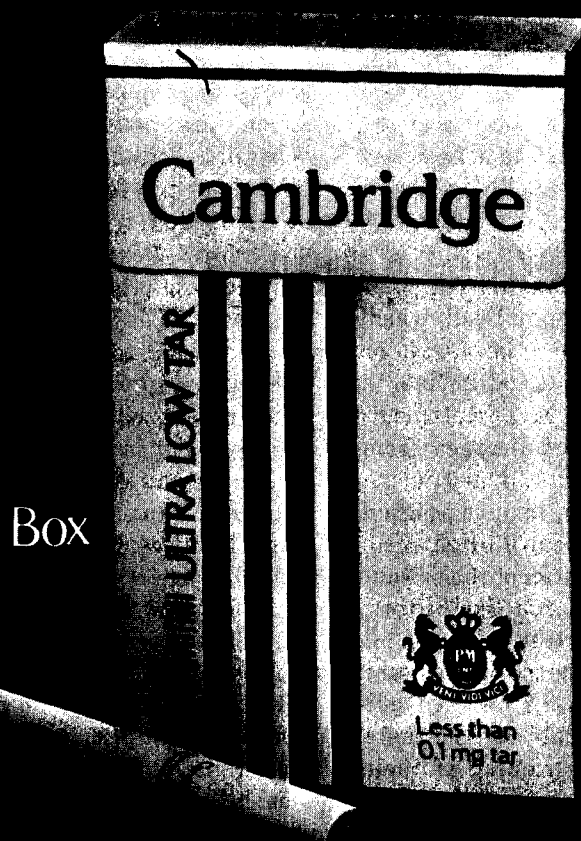
THOSE HAPPY FEW WHO SURVIVED THE SELECTIONS on the ramp were marched off to the quarantine barracks, where they were initiated into a series of rituals designed to destroy their identities and their personalities and thus their capacity for resistance. First they were taken to the yard between Blocks 15 and 16 and ordered to strip off their clothes. All their hair was shaved off. Then they had to run to a nearby bathhouse and take a cold shower. Then they had to run to another

yard, where they were provided with ill-fitting blue-and-white-striped prison uniforms and wooden clogs. Their uniforms bore triangles of different colors, according to the categories of prisoner—green for professional criminals, red for political opposition, yellow for Jews, black for prostitutes and other "asocials," pink for homosexuals, purple for "exponents of the Bible" (Jehovah's Witnesses and other Christian fundamentalists). Jews who fitted into any of the other categories had their yellow triangle superimposed on the first triangle to form a Star of David. Finally, the prisoners had their Auschwitz numbers tattooed on their left forearms. Henceforth, they were told, they were to be known only by this number, not by name. This whole procedure normally took all day, but if the prisoners had arrived in the afternoon, it took all night. Throughout it, they were given no food or water.

Just as the arrival in Auschwitz seemed a relief after days in the crowded freight cars, the arrival in the quarantine barracks seemed a relief after the process of selection and registration. It was, however, a new kind of ordeal, designed to test whether the SS doctors on the ramp had been correct in their choice of survivors. Roll call was at 4:30 A.M., and sometimes the prisoners had to stand in formation all day long. They were drilled in camp routine, trained to form ranks of five, to take off their caps on command, to perform such drudgery as digging ditches and moving rocks, and to take part in "physical training." This physical training, also known as "sport," consisted of running in position until a kapo ordered the prisoners to drop to the ground and start hopping like frogs; then a kapo ordered the prisoners to get up and start running again. "Sport" is a fairly common form of gymnastic drill, but the Auschwitz version lasted for hours, and anyone who faltered was kicked and beaten. After a fifteen-minute break for lunch, the SS training continued with, for example, singing classes. Jews were taught to sing an anti-Semitic song; prisoners of all kinds were taught a song in praise of their own imprisonment. At 3 P.M., the "sport" resumed, and continued until 6:30. Then came another roll call, sometimes lasting two hours. Those who failed to satisfy their guards had to stand at attention all night long. Lagerführer Fritzsche, the man who had first tried out Zyklon B on the Russian prisoners, liked to tell the newcomers: "You have come to a concentration camp, not to a sanatorium, and there is only one way out—through the chimney. Anyone who does not like it can try hanging himself on the wires [an Auschwitz slang phrase that described the most easily available form of suicide: the electrified wire that surrounded the camp carried a current of 6,000 volts]. If there are Jews in this shipment, they have no right to live longer than a fortnight; if there are priests, their period is one month—the rest, three months."

After four to eight weeks in quarantine, the prisoners came to believe that life might be better if they could

THE LOWEST TAR OF ALL.



Box

Of all brands sold,
no other cigarette is
lower in tar.

Cambridge

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

© Philip Morris Inc. 1981

Less than 0.1 mg "tar," 0.01 mg nicotine av. per cigarette by FTC Method.

only reach the main camp. Once again, they were deluded. Auschwitz was designed, just as Fritzsche warned, to work its victims to death. More than 1,000 prisoners were herded into brick barracks built for 400, according to a plan designed by one of the prisoners in the Auschwitz building office. They slept in three-tiered wooden bunks, half-a-dozen prisoners to a bunk, often with no mattresses or blankets. There was little heat and less ventilation. The place stank. The prisoners' only consolation was that Birkenau was even worse. Instead of overcrowded brick barracks, there were overcrowded wooden huts, with leaking roofs and dirt floors that turned to mud. Auschwitz proper had yellowish running water and a primitive sewage system. Birkenau had only a few privvies; at night, the only facilities were some overflowing buckets. At least half of the prisoners—and often two thirds or more—suffered the miseries and humiliation of chronic diarrhea. Many succumbed to typhus. And the rats were everywhere. When someone died during the night, according to a prisoner named Judith Sternberg Newman, the rats “would get at the body before it was cold, and eat the flesh in such a way that it was unrecognizable before morning.”

IN BOTH CAMPS, THE FIRST ORDEAL OF THE DAY was, as in quarantine, the *Appell*, or roll call, which began at about 4:30, somewhat before dawn, rain or shine, frost or snow. Everyone had to stand in line, in rows of five, while the counting began. No exceptions or excuses were permitted. The sick were dragged from their bunks to take part. Even those who had died during the night had to be carried out and propped up in position so that they could be counted. As the dawn brightened, the kapos sauntered up and down the ranks of the prisoners, counting, and hitting anyone they felt like hitting. Sometimes they insisted that the shortest prisoners fill the ranks at the front; sometimes the positions were reversed, with the shortest prisoners in the back. Anyone who didn't move quickly enough was clubbed. And there were always the dogs, snarling and straining at their leashes. At any interruption or disturbance, any break or error in the counting, the process began all over again. The roll call generally lasted three or four hours (punitive roll calls lasted much longer) and not until about 8 o'clock did the SS officers arrive to review the roll-call numbers and send the prisoners out to work.

To work. Arbeit Macht Frei. The prisoners marched off to the booming accompaniment of the Auschwitz band, but without food, or with only the food they had saved from the previous night's ration, or bought or bartered or stolen during the night. Officially, the prisoners were given just enough food to survive. The rations provided for a breakfast of one half-liter of grain coffee or herb tea. The main meal at noon theoretically consisted of one liter of meat soup four times a week and vegetable soup

three times a week. The ingredients were carefully listed in the regulations: the meat soup was supposed to contain 150 grams of potatoes, 150 grams of cabbage, kale, or beetroot, 20 grams of meat. At night, the ration was 350 grams of black bread, sometimes with a sliver of margarine or a dab of beet-sugar jam. In fact, the prisoners never got more than a fraction of their rations. The authorities who bought the supplies regularly saved money by acquiring rotten meat and spoiled vegetables. The guards and cooks took the best share for themselves, to eat or to trade. What the prisoners actually received was a bread made partly of sawdust and a soup made of thistles, or worse. Sometimes, according to Olga Lengyel, a prisoner-nurse in the Auschwitz hospital, it was simply called “surprise soup,” because it contained such unexpected ingredients as buttons, keys, tufts of hair, dead mice, and, on one occasion, a small metal sewing kit complete with needles and thread.

Awful as the food was, the prisoners fought over their shares, and even over the crude bowls from which to eat. Among the 1,500 women in Mrs. Lengyel's barracks, the Nazis distributed just twenty bowls, each of which would hold about two liters, and one pail. “The barracks chief . . . immediately commandeered the pail as a chamber pot,” Mrs. Lengyel recalled. “Her cronies quickly snatched the other bowls for the same use. What could the rest of us do? It seemed as though the Germans constantly sought to pit us against each other, to make us competitive, spiteful, and hateful. In the morning, we had to be content with rinsing the bowls as well as we could before we put in our minute rations. . . . The first days our stomachs rose at the thought of what were actually chamber pots at night. But hunger drives, and we were so starved that we were ready to eat any food.”

An average man needs about 4,800 calories per day to perform heavy labor, about 3,600 calories for ordinary work. The average Auschwitz prisoner, by official post-war estimates that remain uncertain, received about 1,500. Many often got no more than half that amount. Apart from calories, of course, there were gross shortages of vitamins and minerals. Scurvy and skin diseases soon became commonplace. Starving children suffered strange afflictions such as noma, a gangrenous ulceration that creates gaping holes through the cheek. “I saw diseases which you find only in textbooks,” Dr. Lings testified at the Frankfurt trial. She had been sent to Auschwitz in 1943 for helping Jews to escape from Vienna. “I never thought I'd see any of them—for example, pemphigus, a very rare disease, in which large areas of the skin become detached and the patient dies within a few days.”

The basic effect of starvation, though, is simply emaciation and exhaustion. The body feeds on itself, first on the fat and then on the muscles, which become soft and waste away. “The face looked like a mask,” said J. Olbrycht, a professor of nutrition who testified on the

SEPTEMBER 1981

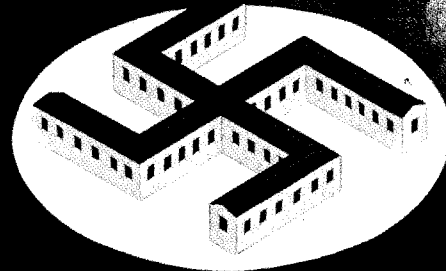
\$1.75

THE Atlantic

SALMAN RUSHDIE / JAN FRAZIER / RAYMOND CARVER / HOLLY BRUBACH / JAMES WOLCOTT

THE KINGDOM OF AUSCHWITZ

BY OTTO FRIEDRICH



The card in this issue will bring The Atlantic to you at a surprisingly reasonable rate.

condition of these prisoners at Hoess's trial in Kraków, "with a faraway look in the eyes and the pupils unnaturally enlarged. There was apathy and sleepiness, the slowing down and weakening of all life processes." The Auschwitz prisoners easily recognized these marks of coming death, and with the stinging acerbity of the death camps, they likened the numbed victims to the starving beggars of India and named them *Muselmänner* ("Moslems"). "Such sick people saw and heard badly," Dr. Olbrycht's testimony continued; "perception, thinking, and all reactions were slowed down . . . hence, also, lethargy in carrying out instructions, wrongly interpreted as evidence of passive resistance." What Dr. Olbrycht meant was that the starving "Moslems" couldn't carry out or even understand the orders barked at them by their guardians, and so they were frequently punished for insubordination and beaten to death.

To work. As a self-contained universe, Auschwitz required and provided work of every sort. The camp had its own bakery, tannery, and tinsmithy. Most of the work, however, was simply brute labor, devoted to the constant expansion of the camp for the constant acquisition of new prisoners. The building went on unremittingly until the very end; a new set of barracks, known as "Mexico," was still under construction when the SS dynamited the camp and departed. "We work beneath the earth and above it," Borowski wrote, "under a roof and in the rain, with the spade, the pickaxe, and the crowbar. We carry huge sacks of cement, lay bricks, put down rails, spread gravel, trample the earth. . . . We are laying the foundation for some new, monstrous civilization. . . ."

UNDER THE NEW ORDER, SUCH LABOR COULD BE SOLD. Many prominent German corporations—among them Krupp, Siemens, and Bayer—were interested in what might be negotiated. Auschwitz began developing a network of outlying subcamps, thirty-four in all. The prisoners worked at a cement plant in Golezów, a coal mine in Wesola, a steel factory in Gliwice, a shoe factory in Chelmek. In the subcamp called Tschechowitz I, the prisoners' main occupation was to remove the fuses from bombs that had failed to explode during Allied air raids.

The biggest of these Auschwitz subcamps was the I. G. Farben plant, started at Dwory with headquarters established later in Monowitz. The plant was known by its principal product: Buna, or synthetic rubber. Its other main installation was a hydrogenation plant designed to convert coal into oil at a rate of nearly 800,000 tons a month. The Farben directors were so impressed with the possibilities of their Auschwitz factories—particularly when they contemplated the victorious end of the war and the whole East European market lying open before them—that they insisted on turning aside all government grants and financing the Auschwitz plants them-

selves. They committed \$250 million to the project, which made the Auschwitz factories the largest in the Farben empire. The SS agreed to provide all necessary labor, for a modest fee. It charged Farben four marks (\$1) a day for each skilled worker, three marks for each unskilled one. Later in the war, the SS agreed to provide child laborers for one and a half marks.

Conditions at Monowitz were much like those at Auschwitz—the dawn roll calls, the starvation rations, and the labor gangs sent out for twelve hours at a time, forced to work at the double, beaten by guards, and harried by giant dogs. The prisoners who died of overwork—dozens of them every day—had to be hauled back to camp at nightfall so that they could be propped up and counted at the next morning's roll call. About 25,000 people, ultimately, were killed in the construction of the I. G. Farben plant. Although one section of the plant started producing synthetic gasoline early in 1944, it was knocked out by a U.S. air raid that summer. One of the enduring ironies of Auschwitz is that the rubber plant at Monowitz, built at such cost and with such suffering, never made one ounce of synthetic rubber.

Of the three or four marks paid daily to the SS for a prisoner's labor, the prisoner, of course, never received a pfennig. The stripped and plundered Auschwitz prisoners were not allowed to own anything. And so, inevitably, the desire to possess things became a passion exceeded only by the desire to eat and the desire to be safe. There arose a vast black market known as "Canada," a row of thirty barracks where the SS stored the plunder confiscated from prisoners arriving on the ramp. "Canada" had everything: not just the basic supplies of food and clothing but diamonds, tapestries, silk underwear, the finest cognac. In the last days of Auschwitz, in January of 1945, the SS men who were evacuating the camp set "Canada" afire and burned all but six of the barracks, but even in that charred ruin the Russians found an almost incredible quantity of things that had once belonged to the dead: 836,255 women's outfits, 38,000 pairs of men's shoes, 13,964 carpets. Since the SS men were corrupt, and the kapos were corrupt, and the prisoners who had survived would do almost anything to go on surviving, everything was for sale—to be traded in the currency of food or clothes or services of all kinds. Even the gold bars melted down from the teeth of the victims of the crematoria, supposedly destined for the national bank in Berlin, often came on the black market. But the chief black-market areas were the latrines and the garbage dump, where prisoners bargained over pieces of stale bread.

SINCE THE OFFICIAL RATIONS, REDUCED BY SS THIEVERY, condemned every prisoner to eventual death by starvation, survival depended on a prisoner's ability to "organize" extra supplies for himself and to find himself a sanctuary in the hospital or the kitchens or in



some other relatively protected quarter. "No prisoner who came to Auschwitz before the summer of 1944 survived unless he held a special job," Dr. Lingens testified.

Out of this struggle for survival, therefore, a prison hierarchy emerged, a hierarchy in which men and women who lived on the brink of death managed to postpone their fate by edging past other prisoners. The hierarchy expressed itself in symbols, all designed to contradict the symbolism of the SS. Just as the SS degraded the prisoners by ordering them to wear shapeless rags, the most resilient and imaginative prisoners fought back by commissioning captive tailors to dress them in the most beautifully fitted prison costumes. Among the women, similarly, prestige attended anyone whose shaven skull began to grow hair again, or who appeared at work in a handsome skirt. All these self-assertions were forbidden, of course, and therefore anyone who appeared in full-grown hair or attractive clothing was assumed to be under someone's protection, a member of the hierarchy.

Fania Fenelon, a French girl who played in the women's orchestra at Birkenau, has described an extraordinary night on which the prostitutes, who dominated the prisoner hierarchy in the women's camp, gave a big party for themselves. They hired the whole orchestra to play dance music in exchange for leftover sausages and sauerkraut. Some of the women, Mlle. Fenelon recalled, had arrayed themselves in their Berlin street finery, black lace underwear and transparent blouses, while others had dressed up as men, sporting silk pajamas. They danced and drank and pawed at each other. "Everywhere women were hugging, kissing, and caressing," she wrote, "lying flat out on tables, sliding to the floor. . . ."

The hierarchy extended from such privileged prisoners upward through the bellicose block seniors and barracks overseers and on to the mighty kapos, who had once been, most of them, common criminals. "These kapos . . . were the aristocrats of the camps," recalled one Auschwitz prisoner, Rudolf Vrba. "They had their own rooms in each barracks and there they entertained their friends to splendid meals. They cooked steak and chips on their stoves, while the smell wafted through thin partitions to starving prisoners, and they washed it down occasionally with slivovitz stolen from victims of the gas chambers."

The kapos were never safe, however, from the ferocity of the SS. If one of them faltered, he could be instantly reduced to the rank of common prisoner, and he knew very well what revenge awaited him in the barracks at night. ("We . . . dragged him onto the cement floor under the stove," Borowski wrote of one such retribution, "where the entire block, grunting and growling, trampled him to death.") In the eyes of the Nazis, the kapos, who strutted about with their clubs, remained no more than criminals, useful in performing disciplinary chores in whatever way best suited the camp's reigning aristocracy: the SS.

THE SS WERE THE SELF-PROCLAIMED ELITE NOT ONLY of Auschwitz but of Nazi Germany and thus of all Europe. Founded in 1925 as a kind of bodyguard for Hitler, the SS had only 280 members when Himmler took it over in 1929. He emphasized its supposedly privileged status, its preference for blond and blue-eyed recruits, its exotic black uniforms. "I swear to you, Adolf Hitler, loyalty and valor," each of the SS men vowed. "I pledge to you . . . obedience unto death, so help me God." By the time the war began, Himmler had created a private army of 250,000 men, including more than a few of the petty criminals he professed to despise. The SS forces at Auschwitz were never large—about 3,000 men to oversee a prison camp of nearly 150,000—but their immaculate uniforms, their guns and whips, and their guard dogs gave them an aura of invincibility.

To the SS men themselves, duty at Auschwitz was chiefly an unpleasant assignment that kept them from far more unpleasant combat on the Russian front. In the East, one could get killed; at Auschwitz, one got extra rations—one-fifth of a liter of vodka, five cigarettes, 100 grams of sausage—for taking part in one of the gassings known as "special actions." At more elevated levels of the SS hierarchy, the rewards were even more generous. Dr. Johann Paul Kremer, a professor of anatomy at the University of Münster, kept a diary of his service in Poland in the fall of 1942, devoting only a few sentences to his role in the "special actions," but savoring the good life at Auschwitz, particularly the food served at the Waffen SS Club. Thus: "Sept. 6, 1942: Today an excellent Sunday dinner: tomato soup, one half of chicken with potatoes and red cabbage, and magnificent vanilla ice cream. . . . Sept. 17: Have ordered a casual coat from Berlin. . . . Sept. 20: This Sunday afternoon I listened from 3 P.M. till 6 P.M. to a concert of the prisoners' band in glorious sunshine; the bandmaster was a conductor of the state opera from Warsaw. Eighty musicians. Roast pork for dinner. . . ."

The isolation of the SS men, who lived above and beyond all the rules of survival that governed the starving prisoners, enabled them to act on whim, to decide questions of life and death on impulse. Thus the strange salvation of Sim Kessel, a French boxer, who had been consigned to the gas chambers. "Now we were ordered to take off our clothes and lay them neatly folded along the wall," Kessel later recalled. "We did so. There we skeletons stood barefoot in the snow." A detachment of SS men roared up on motorcycles, simply to oversee the shipment of these walking corpses to the gas chambers. The naked prisoners stood in the snow and waited. Then Kessel noticed that one of the SS men, a noncom, had a broken nose, and ridges of scar tissue over the eyes, and all the other marks of the ring. "I hesitated for a second and then thought, Oh, what the hell! Naked and shivering, I walked up to him [and] simply blurted out in German: 'Boxer?'"

"'Boxer? Ja!'"

"He didn't wait for me to explain. He understood. I too had a broken nose." The SS man asked Kessel where he had fought, and Kessel named a series of second-rate places: Pacra, Central, Delbor, Japy. The SS man gave a quick smile of recognition, then ordered Kessel to climb aboard his motorcycle so that he could drive him to the sanctuary of the hospital. "It must have been a weird and unforgettable sight," Kessel observed, "the pathetic nude prisoner riding behind an SS on the back seat of a motorcycle, running right through the center of Auschwitz. . . . I never saw him again."

AT THE TOP OF THE HIERARCHY WAS COMMANDANT Hoess, who lived with his wife, Hedwig, and their five children in a tree-shaded stucco house known as Villa Hoess. It stood just outside the southern corner of the camp, separated from the neighboring barracks by a concrete wall high enough so that nothing inside the camp could actually be seen by Hoess's family. Near the wall, Frau Hoess grew rose hedges, and begonias in blue flower boxes. "My wife's garden was a paradise of flowers," the commandant recalled. "No former prisoner can ever say that he was in any way or at any time badly treated in our house. My wife's greatest pleasure would have been to give a present to every prisoner who was in any way connected with our household. The children were perpetually begging me for cigarettes for the prisoners. . . . The children always kept animals in the garden, creatures the prisoners were forever bringing them. Tortoises, martens, cats, lizards. . . . Their greatest joy was when Daddy bathed with them [in the swimming pool]. He had, however, so little time for all these childish pleasures."

The image of the Villa Hoess as a plantation tended by devoted prisoners is about as accurate as Hoess's image of himself as a sternly incorruptible soldier. Stanislaw Dubiel, who somehow managed to remain a gardener to the rulers of Auschwitz from 1940 to 1945, testified that the Hoesses limited themselves neither to their rations nor to their income but rather extorted everything they wanted from the SS hierarchy. "I took from the [prisoners' food] magazine for the Hoess household: sugar, flour, margarine, various baking powders, condiments for soup, macaroni, oat-flakes, cocoa, cinnamon, cream of wheat, peas and other foodstuffs. Frau Hoess never had enough of them. . . . Frau Hoess would very often also demand cream. . . . The equipment and furnishings of the Hoess home were of similar origin. Everything was made by prisoners from camp materials. . . . Hoess settled down in such a well appointed and magnificent home that his wife remarked, '*Hier will ich leben und sterben.*'" "I want to live here till I die." (In 1964, Frau Hoess testified briefly at the Frankfurt trial. She was living in quiet retirement, in Ludvigsburg, West Germany.)

Hoess's self-portrait as a devoted paterfamilias is also exaggerated. He had an affair with an Italian prisoner named Eleonore Hodys, who worked for several months in the Villa Hoess. He then tried to get rid of her by assigning her to the penal company, in which death within a few weeks from overwork and mistreatment was taken for granted. Then she was mysteriously transferred to the stifling dungeons of Block 11. There Hoess secretly visited her. There she became pregnant. When Hoess heard of her pregnancy, he ordered her gassed. "Into the chimney with her," he commanded, according to a witness at the Frankfurt trial. But the chief of Block 11, Max Grabner, who was already being investigated for having an affair with a prisoner, became interested in Eleonore Hodys and informed on Hoess to the same judge who was pursuing Grabner's own case. The judge apparently rescued Eleonore Hodys from Auschwitz, and sent her to Munich, but the SS killed her in the last days of the war.

Hoess's children, to whom the servile prisoners brought presents, understood their father and the world he ruled. A French prisoner named Charlotte Delbo caught a glimpse of that understanding and recorded a matchless image of the commandant's sons at play. She saw two boys, aged about eleven and seven, both blond and blue-eyed. The older one had a sword in his belt, and he screwed an imaginary monocle into his eye as he ordered the younger one, who represented all the prisoners in the camp, to march faster and faster. "Soon the prisoners to whom these orders are addressed can no longer follow. They stumble on the ground, lose their footing. Their commandant is pale with rage. With his switch, he strikes, strikes, strikes. He screams in rage: '*Schnell! Schneller!*'... The little boy staggers, spins around, and falls flat on the grass. The commandant looks at the prisoner whom he has knocked to the ground with contempt, saliva on his lips. And his fury subsides. He feels only disgust. He kicks him—a fake kick, he is barefoot and he's just playing. But the little boy knows the game. The kick turns him over like a limp bag. He lies there, mouth open, eyes glazed over. Then the big boy, with a sign of the stick to the invisible prisoners that surround him, commands: '*Zum Krematorium,*' and moves on. Stiff, satisfied, and disgusted."

IN THEORY, THERE WERE NO CHILDREN UNDER THE AGE of fifteen in Auschwitz. All of them were supposed to be singled out on the railroad ramp, judged unfit for hard labor, and sent directly to the gas chambers. Some survived that process, for various reasons, but eventually the process was almost certain to catch them.

The first Auschwitz prisoner to testify at Frankfurt, Dr. Otto Wolken, a general practitioner in Vienna, told of having encountered a boy in the dispensary and of having asked him, "Well, boy, how are you? Are you afraid?"

The boy answered, "I am not afraid. Everything here is so terrible it can only be better up there."

Then Wolken told of having heard an SS man talking to a boy of about ten through a barbed-wire barrier. The SS man said, "Well, my boy, you know a lot for your age." The boy answered, "I know that I know a lot, and I also know that I won't learn any more."

Then Wolken told of a group of ninety children who arrived in Auschwitz and were placed in quarantine for several days and then were loaded onto trucks to go to the gas chambers.

"There was one boy, a little older than the rest," Wolken testified, "who called out to them when they resisted: 'Climb into the car, don't scream. You saw how your parents and grandparents were gassed. We'll see them again up there.' And then he turned to the SS men and shouted: 'But don't think you'll get away with it. You'll die the way you let us die.' He was a brave boy. In this moment he said what he had to say."

The gas chamber was, in a sense, the easiest fate. Life ended quickly there, whereas the various punishments devised by the SS achieved the same end more slowly and more painfully. Aside from the routine starvation and mistreatment, the most standard of these punishments was public flogging, usually a minimum of twenty-five blows on the bared buttocks with a whip or a wooden club. The victim was sometimes forced to count each blow aloud, and if he failed to keep count, the flogging started again from the beginning. When the ordeal ended, the prisoner was often unconscious, and the bruises on his thighs were frequently so severe that he never recovered.

Even flogging might be considered preferable to the torments inflicted in Block 11. The Gestapo had endless questions to ask, about the camp underground, about escape attempts, about links to the Resistance movement, and it accepted no pleas of ignorance. Deputy Chief Friedrich Wilhelm Boger's favorite method involved the so-called Boger swing, a device of his own invention. "My talking machine will make you talk," he used to tell the prisoners. The swing consisted of a steel bar to which the prisoner was tied by his wrists and ankles. As Boger lunged at him with his club, usually aiming for the genitals, the prisoner swung head over heels, round and round. One prisoner named Breiden, who came to testify at the Frankfurt trial, burst into tears on the witness stand when he saw a replica of the machine to which he had once been bound. "Murderer!" he shouted at Boger.

"Terrible cries could be heard," said another witness, Maryla Rosenthal, who had to work in an adjoining room. "After an hour or more the victims would be carried out on a stretcher. They no longer looked human. I could not recognize them."

One reasonably typical victim was a prisoner from Munich named Gustl Berger. He and another prisoner named Rohmann were accused of having acquired some

alcohol from the SS canteen. Rohmann was confined to one of the *Stehzelle*, or "standing cells." These were vertical tubes, about three feet by three feet across, in which the prisoner could neither sit nor lie. Nor was he fed. "The door never opened," said a Polish prisoner named Josef Kral, who actually survived the standing cells. "One could shout and curse Hitler and everybody else. Nobody would come. Death from hunger is not an easy death. . . . The prisoners screamed, begged, pleaded, licked the walls. . . ."

Rohmann lasted nineteen days, according to the testimony of a Munich businessman named Paul Leo Scheidel, and then he "starved to death, finis, gone." But from Berger, the Gestapo wanted to know how the alcohol had been obtained, and so he was tied to the Boger swing. After forty-five minutes, according to Scheidel's testimony, "the skin on his hands was gone, his buttocks were ripped open, his face was smeared with blood." After his interrogation, Berger was led out into the yard outside Block 11, where the Nazis had built a wall of black cork as the background for thousands of summary executions. In front of the wall lay a bed of sand to soak up the blood that gushed from the victims. "You murderers! You criminals!" Berger shouted. Then Boger shot him.

It might seem that nothing could be worse than Block 11, but Block 10 may have been worse. This was where the SS doctors assembled the prisoners who had been selected for various medical experiments. There seems to have

been very little purpose or coherence to these experiments. Anyone in Germany who had some quasi-scientific proposal that might benefit the state could send his suggestion to Himmler's headquarters in Berlin, and in due time authorizations of one sort or another would be issued. Some of these proposals were relatively innocuous, and so we find the pharmaceutical firm of Bayer asking for "a number of women in connection with our intended experiments with a new sleeping drug."

Other schemes were both lethal and utterly pointless, like the request from a Professor Hirt of the University of Strasbourg that the heads of 150 "Jewish-Bolshevist commissars, who embody a repulsive but characteristic subhumanity," be cut off and sent to Strasbourg for study. Or like Dr. Josef Mengele's obsessive efforts to explore the mysteries of twins. Dr. Miklos Nyiszli, a Hungarian prisoner who served as Mengele's pathologist, reported that "several hundred sets of twins" turned up in Auschwitz. Mengele, who seems to have thought that he was seeking methods to increase the German birthrate, ordered each pair carefully examined and then killed. Since twins do not ordinarily die simultaneously, Mengele considered himself blessed with a rare research opportunity, and he rushed the results of all the autopsies to the Institute of Biological, Racial, and Evolutionary Research in Berlin.

The main medical experiments in Auschwitz dealt with sterilization. Officially, the goal was to refine the pro-



gram of genocide by sterilizing the members of "inferior races" and then putting them to work, rather than simply killing them. As early as March 28, 1941, before the Final Solution was decreed, an SS official named Viktor Brack was urging Himmler to have all able-bodied Jews sterilized by X-rays. Brack's theory was that the unwitting victims should be made to line up at a counter. "There," he wrote, "they would be asked questions or handed a form to fill in, keeping them at the counter for two or three minutes. The clerk behind the counter would . . . start an X-ray apparatus with two tubes to irradiate the persons at the counter." At Auschwitz, as Hoess said, everything was possible. Dr. Horst Schumann of Berlin exposed a batch of several hundred Dutch and Greek Jews to fifteen minutes of radiation of the genital area at a rate of thirty prisoners a day. Many victims suffered severe burns. After three months, Dr. Schumann removed parts of the women's sexual organs to be sent to Berlin for analysis. The men were castrated. Records of these experiments were partially destroyed, but one surviving report from one day in the surgical ward, December 16, 1943, records ninety castrations.

Himmler had meanwhile met Professor Carl Clauberg of the University of Königsberg, who ran a clinic for the treatment of sterile women. Himmler asked Dr. Clauberg whether he could turn his knowledge to the opposite side of the problem and devise a technique of mass sterilization. Clauberg was delighted with the prospect of official

support for his research and unlimited numbers of patients to work on. When he arrived at Auschwitz in the spring of 1943, more than 200 women were installed in Block 10 and placed at his disposal. Clauberg injected various chemicals into their fallopian tubes. His formulas were kept secret, but the main ingredient was apparently a formalin solution. This stopped the women's menstruation. Clauberg pronounced his system a great success. He boasted to Himmler that his method would enable one skilled physician with ten assistants to sterilize several hundred women a day. After the completion of one of Clauberg's experiments, the subjects were generally sent to the gas chambers.

THE WORST CRIME THAT A PRISONER COULD COMMIT at Auschwitz, and therefore the crime most sternly punished, was to attempt an escape. There were more than 600 cases. Once the roll call disclosed that someone was missing, the sirens began wailing, and everything stopped. The prisoners had to stand at attention for hours while detachments of SS men set forth with their dogs to hunt for the fugitive. For as long as three days, the hunt would continue through all the fields and marshes that surrounded Auschwitz. About two thirds of the time, the pursuers soon found their prey. After torturing him to make him confess who had helped him escape, the SS made him parade around the camp with a sign that said: "Hurrah! I'm back!" Then they gathered all the other prisoners to watch his punishment, and they hanged him.

There was a remarkable girl in Birkenau named Mala Zimetbaum, aged twenty-four, tattooed with the number 19880. She was Polish by birth, but her family migrated to Belgium, to Antwerp, and there, after her father went blind, she dropped out of school to help support him and the four other children. When the Germans overran Belgium, she joined the Resistance; she was soon arrested and shipped to Auschwitz. There she became a *Läuferin*, or "runner," someone who carried messages and ran errands all over the camp. That enabled her to do favors and to tip off the prisoners whenever a selection was planned. Everybody loved her for her courage and independence, for a spirit that even the SS men respected.

Mala fell in love with a young Pole named Edek Galinski, also a member of the Resistance, and Edek came up with a scheme to escape from Auschwitz. He found a way to steal an SS uniform, but he needed an SS pass, which only Mala, making her rounds of the camp, could find and acquire. Mala was perfectly willing to get him the pass but pleaded with him to take her along. He agreed.

On June 24, 1944, Edek Galinski marched out of Auschwitz in the uniform of an SS man. At the gate, he displayed documents declaring that he was authorized to take with him the female prisoner who was in his custody. Having performed this impossible feat, Mala and



Edek seem to have lost all sense of who and where they were. Accounts of their wanderings differ, but they appear to have stopped in the nearby town of Oświęcim, which still harbored a few shops and cafés and an illusory sense of tranquillity, and there found themselves a room and made love. They apparently thought that their SS papers made them invisible, or immune to the laws of Auschwitz. For several weeks, they survived in this absurd defiance; then an SS man accosted them in a café, asked to see their papers, and refused to accept the faked papers that they offered him.

So the prisoners were assembled on August 22 to watch the bruised and bloodied Mala go to the gallows. She refused to carry the sign rejoicing in her recapture. But the commander of the Birkenau women's camp, Marie Mandel, looked triumphant as she began reading out the death sentence. While she read, Mala suddenly produced a razor blade and slashed her own wrist. An SS man named Ritters grabbed her arm and tried to stop her. Mala managed to strike one last blow in her defense: she smashed the SS man in the face with her bloody fist.

"Murderers!" Mala cried out. "You will soon pay for our suffering! Don't be afraid, girls! Their end is near. I am certain of that. I know. I was free!"

A half-dozen SS men threw themselves on Mala, clubbed her to the ground, kicked her prostrate body, and flung her into the back of a waiting truck, which took her to the crematorium.

On the other side of the camp, a similar ceremony awaited Edek Galinski. He was bloodied almost beyond recognition by the Gestapo men in Block 11, but in the middle of the reading of the death sentence, he leaped onto a bench, thrust his head into the waiting noose, and then kicked over the bench. His last words were an unfinished cry of defiance: "Long live the Po—"

IT MAY SEEM ABSURD TO REPORT THAT LIFE IN HELL could gradually improve, but there is much testimony to confirm that conditions in Auschwitz did get somewhat better during 1943 and early 1944. "At the beginning, beating and killing were the rule, but later this became only sporadic," Borowski wrote as he listed the new comforts. "At first you had to sleep on the floor lying on your side because of the lack of space, and could turn over only on command; later you slept in bunks, or wherever you wished, sometimes even in bed. Originally, you had to stand at roll call for as long as two days at a time, later only until the second gong, until nine o'clock. In the early years, packages were forbidden, later you could receive 500 grams, and finally as much as you wanted."

One reason for the change may be that Rudolf Hoess won a promotion in November of 1943 and was summoned back to Berlin to become inspector of concentration camps. SS Lieutenant Colonel Arthur Liebehens-

schel, a rather small, pudgy man with bulging eyes, stepped into his place as commandant of Auschwitz and initiated a series of modest changes and reforms. Another reason for the less-stringent discipline may be that a German victory, on which the Final Solution was predicated, no longer seemed so certain. The retreat from Russia following the surrender of Stalingrad on January 31, 1943, was irreversible. At the other end of Hitler's empire, the Americans and the British had invaded Morocco in November of 1942 and conquered all of North Africa by the following May, then invaded Sicily in July. Such events forced even the most dedicated of SS officers to wonder about their own future. The changing fortunes of war did not by any means bring a modification of the Final Solution, however. On the contrary, the difficulties inspired the SS officers in command of the annihilation to try to finish their assignment before they could be prevented from carrying it out. What this meant at Auschwitz was that life got better for the camp inmates, because about three quarters of the inmates were gentiles, and after June of 1943, the Nazis stopped gassing gentiles. They could still be shot, of course, for any number of offenses, from attempting escape to stealing a piece of bread. But the SS now concentrated its efforts on the destruction of the Jews.

For this, Auschwitz was reorganized again. In May of 1944, Hoess resumed command of the camp he had created, but he exercised only a general supervision. Direct command over Auschwitz was delegated to Richard Baer, and over Birkenau to Josef Kramer, two killers worthy of the task ahead. The next step was to renovate the giant crematoria, to repair all cracks in the brickwork, to reinforce the chimneys with steel bands, to repaint the "changing rooms," to prepare all the machinery for maximum use. The railroad line was extended into Birkenau, so that prisoners could be unloaded within 200 yards of the crematoria rather than be trucked over from the main camp at Auschwitz. The culmination of the Holocaust, the annihilation of the Jews of Hungary, was about to begin.

UNTIL THE LAST YEAR OF THE WAR, HUNGARY HAD provided a kind of haven for the Jews of Eastern Europe. The septuagenarian Miklós Horthy, who had served since 1920 as admiral of Hungary's nonexistent Navy and as regent for its nonexistent monarchy, joined the war on Hitler's side mainly in order to expand Hungary's sovereignty over territories to its east. In contrast to Poland during the roundups, Hungary offered some hope of sanctuary to any fugitive who could slip across its borders, and the Jewish population consequently increased from about 500,000 at the start of the war to more than 800,000 (there were also about 150,000 converted Jews, whose status as Christians was recognized by the Catholic Church and disputed by the

Nazis.) They lived in a state of constant fear, but they lived.

By March of 1944, when the Red Army was only a few days' march from the Hungarian border, the Hungarians began talking of surrender. The Nazis sent troops into Budapest. By March 19, Adolf Eichmann had already established his headquarters at the Majestic Hotel. He invited the Jewish leaders of Budapest to establish a Judenrat, or "Jewish council," that ugly institution by which the Germans assigned the Jews to organize themselves for the execution of orders from Berlin, assigned them to decide for themselves who should be the first to be deported and who should be spared until the next order came. "Do you know what I am?" Eichmann asked at his first meeting with the Jewish Council of Hungary on March 31. "I am a bloodhound."

On May 15, the deportations to Auschwitz began. It was an operation in which Eichmann took considerable pride. In the middle of a major military campaign—in the middle, in fact, of a catastrophic retreat from the battlefields of the East—Eichmann managed to bargain and negotiate for enough trains to ship half a million Hungarian Jews to their death. "It was ten o'clock one morning that the first of the trains were unloaded," recalled Kitty Hart, a teenage Polish girl who worked among the mountains of confiscated goods in "Canada." "From the distance we could see masses of people standing, waiting. . . . Their column stretched as far as the eye could see. It seemed as though they were disposing of the whole of Europe."

Very few selections were made now. The SS men and their dogs herded the prisoners along a cinder path, surrounded by neatly mowed lawns, toward a concrete stairway. A dozen steps led downward to the brightly lit "changing room." Each of these rooms in the four new crematoria was some 300 square yards in size and could accommodate as many as 1,000 people at a time. There were signs in German, French, Greek, and Hungarian, all saying, "Baths and Disinfecting Room." Other signs warned of diseases: "Cleanliness brings freedom," and "One louse can kill you." There were wooden benches along the walls, and above these benches were pegs and coat hangers. More signs told the prisoners to hang up their clothes, and to tie their shoes together by the laces. The pegs were numbered, and the signs told the prisoners to remember their numbers so that they could retrieve their clothes after the baths. Once the prisoners had undressed, they were herded into another large room, also brightly lit. When they were all inside, the doors were bolted shut, and the lights were switched off. Some of the prisoners embraced each other as they waited. Some simply waited, numb. The gas had a smell of something burning.

"Twenty minutes later, the electric ventilators were set going in order to evacuate the gas," Dr. Nyiszli, Mengele's pathologist and a medical witness to these scenes,

recalled in the memoir he wrote in 1946. "The doors opened. . . . The bodies were not lying here and there throughout the room but piled in a mass to the ceiling. The reason for this was that the gas first inundated the lower layers of air and rose but slowly toward the ceiling. This forced the victims to trample one another in a frantic effort to escape the gas. . . . I noticed that the bodies of the women, the children, and the aged were at the bottom of the pile; at the top, the strongest. Their bodies, which were covered with scratches and bruises from the struggle which had set them against each other, were often interlaced. Blood oozed from their noses and mouths; their faces, bloated and blue, were so deformed as to be almost unrecognizable. . . . The Sonderkommando squad, outfitted with large rubber boots, lined up around the hill of bodies and flooded it with powerful jets of water. This was necessary because the final act of those who die by drowning or by gas is an involuntary defecation. Each body was befouled and had to be washed. Once the 'bathing' of the dead was finished . . . they knotted thongs around the wrists . . . and with these thongs they dragged the slippery bodies to the elevators in the next room."

Even the most elaborate plans proved insufficient for the liquidation of the Hungarians that summer. Though the crematoria worked night and day, there were still too many bodies to be destroyed (the highest number actually gassed within twenty-four hours, Hoess estimated, was 9,000). The Nazis had to resort once again to the more primitive means that they had previously abandoned. In the fields of wild flowers that were now blooming behind the crematoria, Hoess ordered nine gigantic pits dug. There he had thousands more bodies dumped in and set afire. It is not easy to burn bodies, particularly emaciated bodies. The first attempts, long before the crematoria were built, had used up a lot of scarce coke. The Nazis had therefore conducted a series of experiments to find out how to save fuel. They soon found that if a fat man was burned along with a thin one, the fat man's fat would serve as fuel to consume the thin one. In due time, they discovered a still more efficient combination: a fat man and a thin woman (or vice versa) and a child. By the time of the slaughter of the Jews of Hungary, they had reached even higher levels of efficiency. The pits to be filled with corpses, up to 2,000 at a time, had been dug with slanted bottoms so that the fat could flow into containers and be scooped up and poured back over the burning bodies.

"The corpses in the pit looked as if they had been chained together," according to Filip Müller, a Czech Jew who worked in the Sonderkommando. "Tongues of a thousand tiny blue-red flames were licking at them. . . . Blisters which had formed on their skin burst one by one. Almost every corpse was covered with black scorch marks and glistened as if it had been greased. The searing heat had burst open their bellies: There was the vio-

lent hissing and sputtering of frying in great heat. . . . Fanned by the wind, the flames, dark red before, now took on a fiery white hue. . . . The process of incineration took five to six hours. What was left barely filled a third of the pit. The shiny whitish-gray surface was strewn with countless skulls. . . ."

WHILE THESE FIRES WERE BURNING IN THE SUMMER of 1944—fires that could be seen from as far as thirty miles away—the advancing Allied armies finally came within bombing range of the railroad lines from Budapest to Auschwitz and, for that matter, within range of Auschwitz itself. Specifically, the U.S. Eighth Air Force, based in Britain, and the Fifteenth Air Force, based in southern Italy, were already beginning to bomb military targets in Poland. On April 4, 1944, U.S. reconnaissance planes flying over Auschwitz took some remarkably clear photographs (hidden in the CIA archives until 1979) that show all the essential evidence—the gas chambers and crematoria, the prisoners standing in line—yet even the experts trained to interpret such photographic evidence apparently saw nothing but a large prison camp.

What was happening at Auschwitz could not be imagined and therefore could not be believed, not even when photographed; could not be believed even when reported in detail by escaping prisoners; could not be believed, and therefore could not be stopped. There certainly was nothing secret about the existence of Hitler's concentration camps. The Nazis almost boasted of them. The Final Solution, however, was officially a state secret, and the SS went to considerable effort to keep it a secret. Even though it was widely known that deportation to the East meant great hardship and often death, anyone who spoke of the Auschwitz crematoria faced severe punishment.

The prisoners tried, at great risk and sacrifice, to tell the world. As early as November of 1940, a brave Polish officer named Witold Pilecki, who voluntarily got himself sent to Auschwitz in order to organize a resistance movement there, smuggled out a message describing the appalling conditions at the camp. Appalling conditions are not the same as systematic extermination, however. By the summer of 1942, the Allied capitals had received reports of mass slaughters, from the camps themselves, from neutral observers, even from anti-Nazi Germans. In the spring of 1944, finally, Rudolf Vrba and Alfred Wetzler escaped from Auschwitz, reached Czechoslovakia, and produced a sixty-page report on the gassing and burning at Birkenau, a report that managed to get to the White House, the Vatican, the Red Cross, and the Jewish community leaders in Budapest. Allied leaders, preoccupied with military strategy, remained skeptical. There was a certain amount of anti-Semitism in Washington, and in the United States at large (not to mention Britain and Russia), and those who heard the recur-

rent reports from Poland tended to regard them as propaganda, wildly exaggerated. Even those who were inclined to intervene on behalf of the Jews feared being accused of diverting resources from the overall war effort.

In January of 1944, President Roosevelt did establish a War Refugee Board (WRB), which was supposed to "take all measures within its power to rescue the victims of enemy oppression," but it had very little power to take any such measures. Proposals for military action against the Hungarian deportations attracted little attention or support. A War Department statement of policy said: "It is not contemplated that units or individuals of the armed forces will be employed for the purpose of rescuing victims of enemy oppression unless such rescues are the direct result of military operations."

In late June, when the killing of the Hungarians had been going on for more than a month, the U.S. legation in Bern reported that both the Jewish deportations and some considerable German troop movements followed five specific railroad lines. "It is urged by all sources of this information . . ." the Bern cable said, "that vital sections of these lines, especially bridges along one, be bombed as the only possible means of slowing down or stopping future deportations." John W. Pehle, executive director of the War Refugee Board, sent a copy of this message to John J. McCloy at the War Department. On July 4, after most Hungarian deportations had already ended in the Auschwitz gas chambers, McCloy sent Pehle a message saying that the War Department was opposed to any raid on the railroad lines to Auschwitz. "It could be executed only by the diversion of considerable air support essential to the success of our forces now engaged in decisive operations and would in any case be of such doubtful efficacy that it would not amount to a practical project." As it happened, U.S. bombers actually did raid Auschwitz, in August and again in September, aiming at the synthetic oil plant affiliated with the camp. They accidentally dropped a few bombs on Auschwitz itself, and killed fifteen German soldiers.

Though the Allies refused to strike at the gas chambers of Auschwitz, this was one of the rare occasions when strong words partially made up for the lack of action. The first protest came from the papal nuncio to Budapest, Angelo Rotta, who warned the Hungarian government on the day that the first train left for Auschwitz: "The whole world knows what the deportations mean in practice." The Hungarian bishops complained too, partly because Eichmann's forces were making no distinctions between Orthodox Jews and those who had converted to Christianity. Finally, Monsignor Rotta delivered a gentle protest from Pope Pius XII. The next day, June 25, the aged Admiral Horthy issued instructions that the deportations were to cease. Horthy's authority, particularly over the Germans, was limited. Eichmann's roundups continued. U.S. Secretary of State Cordell Hull delivered a note via the Swiss legation on June 26 threat-

ening reprisals, and President Roosevelt publicly warned that "Hungary's fate will not be like any other civilization . . . unless deportations are stopped." Sweden sent Raoul Wallenberg as a special envoy to Budapest, authorized to issue thousands of Swedish visas to the threatened Jews, and the Swiss and Portuguese joined in establishing shelters where Jews could find haven.

Hungary itself stood at the edge of collapse. The Red Army was at its frontiers, and the various authorities in Budapest issued contradictory orders. Premier Dome Sztójay assured the papal nuncio on July 8 that all transports to Auschwitz had stopped. Eichmann still commanded a unit of 150 men, and he sent them to round up another 1,450 Jews on July 14 and pack them aboard a train. An order from Horthy stopped the train before it left Hungary, but two more of Eichmann's trains carried more than 2,000 Jews to Auschwitz on July 19 and 24. They were the last. By now, the Nazi regime itself was crumbling. When a Polish resistance group seized control of the Majdanek death camp on July 24 and turned it over to the advancing Russians, Allied war correspondents got their first look at gas chambers, crematoria, and piles of human bones. Still Hitler shouted that all Germans would fight on to the death.

AT AUSCHWITZ, THE HALTING OF THE TRAINS FROM Budapest did not halt the gassings, not yet. The apparatus of extermination appeared to be running on its own momentum, and the camp was crowded with prisoners, ready to be fed into the machinery. First came the destruction of the so-called Family Camp, originally at Theresienstadt, where distinguished prisoners who couldn't simply be made to disappear had been interned. When the new orders decreed the extermination of the Family Camp, the victims couldn't believe it. Even inside the changing room, they shouted their disbelief: "We want to live! We want to work!" The SS men, with their truncheons and their police dogs, herded them toward the gas chambers. There, according to Filip Müller, who watched as a member of the Sonderkommando, one group sang first the Czechoslovak national anthem and then the Hebrew song "Hatikvah." Four thousand people from the Family Camp were killed on March 9, the last 4,000 on July 12.

Hoess turned over his command to Richard Baer on July 29 and returned to Berlin, but the gassing went on. Next came the turn of the gypsies. Himmler had originally rounded them up and sent them to Auschwitz not for extermination but for scientific examination. He had been fascinated for years by the imagery of prehistoric Germany, its Nordic gods and runic inscriptions, its legends of unconquerable Goths and Vandals, and he somehow imagined that the mysterious gypsies were the descendants of these lost tribes. Many of them were shot and beaten in the course of the roundups, but when they

finally reached Auschwitz, they were isolated and observed and encouraged to carry on their folk traditions. The men were not required to work. An orchestra was formed, and everybody danced. The women tended the children, and the children clambered all over each other. They too felt themselves immune. Nobody was immune. As that last summer wore on, Himmler lost interest in the gypsies and decreed their annihilation. On the night of August 2, all of them, some 4,000, went to the gas chambers.

AS THE NAZI DEFEAT BECAME INEVITABLE, AUSCHWITZ swarmed with rumors that the SS would end by killing everyone in the camp. This prospect seemed particularly ominous to one group of prisoners, the Sonderkommando. Its whole function, its whole existence depended on the crematoria, and each new squad began by taking part in an essential ritual, the killing of its predecessors. For performing their degrading work in the gas chambers, the men of the Sonderkommando were remarkably well treated. They lived in special quarters in the crematoria buildings, and all the plunder of "Canada" was theirs. "The table awaiting us," one of the few survivors later wrote of his arrival at the Sonderkommando barracks, "was covered with a heavy silk brocade tablecloth; fine initialed porcelain dishes; and place settings of silver. . . . all sorts of preserves, bacon, jellies, several kinds of salami, cakes and chocolate." They drank fine cognac until they could no longer stand up, and then they fell into bed on linen sheets. Some members of the Sonderkommando went mad, and some committed suicide, but most of them struggled on for three months or so, and then they ended as they had begun, in a ritual of replacement. Their successors, on orders from the SS, steered them, unprotesting, willing, and perhaps even eager to die, into the gas chambers.

The last of the Sonderkommando, however, were not ready to die. The prospect of their imminent annihilation in the final days of the camp suddenly filled them with a passion to rebel. This Sonderkommando had been expanded, in order to deal with the Hungarians, from about 200 men to 700, and as these men realized that they themselves were doomed, they began to arm. By theft and bribery, and with infinite stealth, they smuggled into their luxurious quarters, one by one, a pistol, then a grenade, then more grenades. As early as June, the Sonderkommando planned a full-scale uprising. The prisoners would attack their SS guards, seize their weapons and uniforms, then bluff their way past the sentries, escape into the woods, and join forces with Polish partisan units.

On October 7, Polish underground agents in the Auschwitz administrative office sent word to the Sonderkommando that the SS had decided on their liquidation, and that it might come at any moment. The ringleaders gath-

ered inside Crematorium IV to decide what to do. That same day, an SS officer named Busch had told the kapos of Crematorium IV that he needed 300 men from the Sonderkommando to go and clear rubble in a town in Upper Silesia. The kapos suspected that this was a ruse that would lead to their death. Filip Müller, who was one of the prisoners standing at roll call in the yard, noted that some prisoners didn't answer when their numbers were called. Busch sent several guards into the crematorium to look for them. "The guards were just leaving," Müller recalled, "when quite suddenly from out of the ranks of selected prisoners they were pelted with a hail of stones. Some SS men were wounded, but others managed to dodge the stones and were drawing their guns and starting to shoot wildly into the crowd of prisoners. Two more SS men had managed to get away to the camp street where they grabbed two bicycles leaning against the camouflage fence and sped off."

Inside the crematorium itself, the assembled ringleaders had been surprised by a kapo who was not in on the plot, and so they killed him. Then they packed the hated crematorium with their precious store of explosives and some oil-soaked rags, and blew it up. The explosion signaled to the Sonderkommando in the other installations that the revolt had begun. In Crematorium II, the rebels quickly seized control. They threw one SS man and one German kapo into the furnace and burned them alive. They also beat one German soldier to death. Then they poured out into the prison yard, cut holes in the surrounding fence, and fled toward the woods. But they ran in the wrong direction, not northeast toward the Vistula but southwest toward the Rajsko subcamp. That kept them within the confines of the camp's outer fences.

In fact, the Sonderkommando did almost everything wrong. The uprising had originally been planned for the night but started in broad daylight. All the crematoria were supposed to rebel at once, and in silence, so that the rebels could secretly organize a mass escape, but the shooting at Crematorium IV warned the SS men of trouble, and they quickly secured the three other crematoria. And since the uprising had not been coordinated with the Polish underground, there were no partisan units to help anyone who escaped. When the hunt was over, more than 500 of the Sonderkommando had been killed. The SS casualties: three dead, twelve wounded.

The remnants of the Sonderkommando, 198 men, still hoped that they could somehow survive. The SS had other plans. At about two o'clock in the afternoon of November 17, they were all marched to Crematorium II, and the doors were locked behind them. They were not ordered to undress, for there was no need for any pretense of showers. They all knew they were going to die, and they attempted neither protest nor revolt. As they stood silently awaiting their execution, they suddenly heard the voice of a man whom they knew only as "the *dayyan*" ("judge," in Hebrew). He was a thin, bespectacled Pole of

about thirty, who devoted himself to the study of Scripture. The Nazis often amused themselves by assigning such people to the most degrading work in the camp, particularly the latrine-cleaning detail, known as the Scheisskommando, but this *dayyan*, assigned to the crematoria, absolutely refused to take any part in the mutilation and burning of the corpses. He also rejected the luxuries of the Sonderkommando, eating only the bread rations of the ordinary prisoners. Such insubordination should have led quickly to his execution, but there was something about this unworldly *dayyan* that prompted the Nazis to spare him. He was assigned to a detail that sorted out the hair shaved from the dead, and even here he spent his time arguing with prisoners who raged at the God who had consigned them to such a fate. "Listen, *Dayyan*, not once have I felt even a breath of divine justice here," one twenty-year-old youth named Menachem charged. "Absolutely everything that you stuffed into my head in school is just nonsense. There is no God, and if there is one, he is an ox and a bastard!" The SS men guffawed at such disputations, according to Filip Müller, who recorded this one, but the *dayyan* did his best to uphold the faith even in these disastrous circumstances. "If the Haggadah commands man in each generation to look at himself as if he himself had migrated from Egypt," he said, "the brothers who perhaps by a miracle will manage to survive will read the Haggadah, made whole by their experiences in Auschwitz."

Now, sealed into their underground tomb, the last of the Sonderkommando heard once again the voice of the *dayyan*.

"Brothers!" he called out. "Fellow Jews. . . . Fate has allotted us the cruelest of tasks, that of participating in our own destruction, of witnessing our own disappearance, down to the very ashes to which we are reduced. . . . We must accept, resignedly, as sons of Israel should, that this is the way things must be. God has so ordained it. Why? It is not for us, miserable humans, to seek the answer. This is the fate that has befallen us. Do not be afraid of death. What is life worth, even if, by some strange miracle, we should manage to remain alive? We would return to our cities and towns to find cold and pillaged homes. . . . We would wander like the restless, shuffling shadows of our former selves, of our completed pasts, finding nowhere any peace or rest."

A few minutes after this impassioned sermon in the underground mausoleum, three SS men with machine guns opened the door and ordered all doctors to return to their quarters to await further assignment, and that was how Dr. Nyiszli, one of three doctors who emerged into the sunlight, survived to record this scene. The next time he saw the last of the Sonderkommando, they were charred beyond recognition. The SS had taken them out into the fields outside the camp and turned flamethrowers on them.



AT SOME POINT DURING THE EARLY FALL OF 1944—probably between mid-September and mid-October—Himmler decided to end the gassings. He seems to have hoped that he could somehow replace Hitler and negotiate a truce with the onrushing Allies. The killings did not end immediately, for the machinery was not easy to stop, but on October 28, when 1,700 Jews from Theresienstadt were crowded into the gas chambers and put to death, they became the last transport to be put to death with Zyklon B. On November 26, an order from Himmler declared: “The crematoria at Auschwitz are to be dismantled.” He seems to have deluded himself that all evidence of what had happened at Auschwitz and the other Polish death camps could be destroyed.

The last spasms of killing were relentlessly legal. On January 6, 1945, when the camp was covered with a heavy blanket of snow, the prisoners in the women’s camp at Birkenau were assembled to watch a hanging. The SS had been working for three months to discover who had provided the explosives used in the revolt of the Sonderkommando, and after subjecting certain suspects to torture, they had identified four young Jewish girls who worked at I. G. Farben’s Union munitions factory. These four were thereupon convicted of smuggling and sentenced to death. Two of them were marched up to a specially erected gallows. “They were wearing their regular clothes, except that they did not have their coats on,” recalled Judith Sternberg Newman, an eyewitness and a

good friend of one of the victims, Aline Gärtner. “They walked calmly, their faces composed. . . . An SS man bound their hands behind their backs. . . . Aline was then pulled up on the table, and her last words were: ‘You’ll pay for this. I shall die now, but your turn will come soon.’ The executioner fixed the noose around her neck, and she was pulled up by the rope. Now a noose was put around the other girl’s neck. . . . All she said when they lifted her up on the table was: ‘I hope all my comrades will get their freedom.’ They hung there like two marionettes, turning in the breeze.”

The second girl, a Pole, had a younger sister who was also among the condemned, but her hanging had been delayed. “She had been left behind in her block, for she had suffered a complete nervous breakdown,” Mrs. Newman reported. “Her wild screams could be heard from afar.” The execution was not delayed for long. Just after dark, that same night, the mad girl and the fourth prisoner were taken out to the gallows and hanged. Those were the last official executions at Auschwitz.

The Red Army, which had been stalled for weeks within about fifty miles of Auschwitz, finally launched a surprise offensive on January 12, 1945. Within a week, its artillery was pounding the outskirts of the camp, and shortly after midnight on January 18, the Nazis ordered a general evacuation. They dynamited the brick walls of Crematorium V, the last one still standing. They set fire to “Canada.” It was about 10 degrees below zero when the

SS began routing the ragged prisoners out onto the snow-covered fields and bullying them into the customary ranks of five. Even then, there were long delays, roll calls, shouts, and confusion. Several thousand prisoners in the camp hospital argued about whether to join the evacuation, and those who wanted to flee fought over the few pairs of wooden clogs that the authorities had left them to use in going to the latrines. Among the SS, too, there were arguments about whether to kill everyone who couldn't march. There had been various plans drawn up for the complete annihilation of the camp and all remaining prisoners, but nobody had ever formally issued the orders to carry out this final massacre. By now, the SS men were thinking mainly of flight from the dreaded Russians, so they decided simply to leave the sick and injured behind. Or perhaps no one decided anything, and the sick were just abandoned in the chaos of the four-day evacuation.

At 3 P.M. on January 27, 1945, more than a week after the SS evacuation, some white-caped reconnaissance scouts for the First Ukrainian Front emerged from the woods and saw the rows of barracks, the miles of barbed wire, the empty guard posts. Inside the camp, they found some 7,650 of those half-dead prisoners whom the SS had judged too feeble to be worth evacuating. (This number, like so many Auschwitz statistics, is hardly more than an official approximation. Indeed, the total number of Auschwitz survivors is almost as cloudy as the number of dead. The estimates generally run around 30,000, which means that of all the prisoners shipped to Auschwitz, fewer than one percent lived.) "There was a mad rush to shake them by the hand and shout out our gratitude," said one of the survivors, Karel Ornstein. "Several prisoners waved red scarves. The shouts of joy [could] have gone on forever."

The 60,000 prisoners who were marched off into the snow and darkness had been issued only one day's ration of bread. Most of them had no coats or blankets. They were heading vaguely toward the Gross-Rosen camp, some 150 miles to the west, but most of the prisoners did not know where they were going, and many of their guards did not know how to get there.

As the first dawn broke, Dr. Nyiszli's unit had gone about ten miles from Auschwitz. "All along the way I noticed pots and blankets and wooden shoes that had been abandoned by a convoy of women who had preceded us. A few miles farther on we came upon a much sadder sight: every forty or fifty yards, a bloody body lay in a ditch beside the road. For miles and miles it was the same story: bodies everywhere. Exhausted, they had been unable to walk any farther; when they had strayed from the ranks an SS man had dispatched them with a bullet in the back."

In the opposite direction came, of all people, Rudolf Hoess, the creator of Auschwitz, now frantic and enraged at this spectacle of disorderly flight. Since Himmler had

by now issued stern orders against the wanton killing of prisoners, Hoess claimed that he too had become an upholder of the law. When he heard a pistol shot, he stopped his car and accosted a German sergeant who had just killed a prisoner. "I shouted at him, asking him what he thought he was doing, and what harm the prisoner had done him. He laughed impertinently in my face and asked me what I proposed to do about it. I drew my pistol and shot him."

About one third of the prisoners who marched west from Auschwitz died along the way. And for the survivors, survival meant to arrive, starving and frozen and exhausted, at some destination such as Mauthausen, a hilltop fortress near Linz, where tens of thousands of prisoners had been worked to death in the nearby granite quarries. Yet, in a way, the 8,000 Auschwitz prisoners who reached Mauthausen were lucky. Most of them got some food and new clothing and were then shipped to smaller camps in the area. A far worse fate awaited the largest contingent of evacuees, perhaps 10,000 in all, which finally arrived at Bergen-Belsen.

Bergen-Belsen, near the old Hanseatic town of Hanover, was once a Wehrmacht camp for wounded prisoners of war. It was quite small, designed for 7,000 men, who lived in a series of neat little buildings connected by neat little pathways. Not until 1943 did the SS get control of half the camp, and even then it remained, relatively, a "model" camp. But in the spring of 1945, its population suddenly increased to 50,000. There was absolutely no food, and almost no water, and there were just a few latrines. Within weeks, typhus and dysentery were everywhere, and so were rats. Thousands of prisoners simply starved to death. The rest, who knew the war was almost over, ambled about or sat in a stupor, waiting for someone to rescue them.

The first man from the outside world to enter this inferno was a British psychological-warfare officer, Captain Derek Sington, who had been ordered to negotiate the takeover of the camp. He could hardly believe what he saw. Along with 28,000 women and 12,000 men, all haggard and emaciated, there were 13,000 unburied corpses, some stacked in piles like pieces of firewood, many just lying around wherever they had fallen. (Among the dead was Anne Frank, who succumbed here during the last weeks of the war.) The half-mad commandant, Josef Kramer, proved to be "genial and friendly," said Sington. He described his prisoners to the British as "habitual criminals, felons, and homosexuals." He accompanied Sington on a tour of the camp in a British armored car, and the British repeatedly announced through bullhorns that the camp was now liberated. The prisoners, too, could hardly believe what they saw. Many of them simply stared numbly at their liberators. Some of the women began sobbing. A few ceremoniously scattered twigs and leaves in the path of the armored car. Kramer became alarmed. "Now the tumult is beginning,"

he said to Sington. The orderly camp had been "disrupted." Behind him, Sington heard the sound of gunfire as the Germans attempted even after their surrender to enforce their authority. Sington strode up to a Wehrmacht officer who was firing just over the heads of some prisoners and ordered him at gunpoint to stop. Sington then told Kramer that if any prisoners were shot for any reason whatever, the British would immediately shoot an equal number of SS men. Kramer grudgingly acquiesced.

"Feed the living and bury the dead," the Marquis of Pombal had proposed as his prescription for healing the ravages of the Lisbon earthquake. The British did just that. As gently as soldiers could, they fed and cared for the starving prisoners and brought most of them back to life. Many of them, however, were beyond all help. It is estimated that 10,000 inmates liberated at Bergen-Belsen died shortly after their liberation. As for the mountains of decaying corpses, the British simply brought in bulldozers to push the bodies into vast pits and covered them with lime. Then they bulldozed the rest of the camp—everything. All that is left of Bergen-Belsen today is a series of swollen graves, covered with grass.

AUSCHWITZ REMAINS. IT IS A MUSEUM NOW, AND THE marshy grass grows tall alongside the rusting railroad tracks that end at the haunted ramp of Birkenau. The Poles wanted to keep everything just as it was—"a monument of the martyrdom of the Polish nation," according to the official decree, "and of other nations"—and so they left the giant brick crematoria in ruins, just as the SS men had left them in their frenzy to escape. At the same time, the Poles wanted to preserve and demonstrate and explain, and so they repaired and repainted some of the grimmest barracks and filled them with educational exhibitions.

Here, in Block 4, is a "Hall of Nations," outfitted with the flags of all the occupied lands that gave up their citizens to Auschwitz; here an artfully constructed model of the destroyed gas chambers; and here a mountain of the hair cut from the women who were murdered. The Soviet troops who liberated Auschwitz found more than 15,000 pounds of this hair awaiting shipment back to Germany for use as pillow stuffing. And here, in Block 5, is a display case containing all the artificial arms and legs, dozens and dozens of them, that were stripped from crippled prisoners before their execution. Here, in Block 6, is another glass case, in which the tattered rags of the prisoners are neatly hung up for observation, like the costumes of a tribe that has long since vanished. And here, forever preserved, is the daily food ration that so many prisoners never got: the bowl of soup, the chunk of bread, the dab of margarine, the shriveled slice of sausage. Here, in Block 7, are the three-tiered bunks, neat and clean now, and empty. In the cellar of Block 11, the "standing cells" are available for inspection, and the

benches on which prisoners were flogged, and the clubs that were used to flog them. And here, next to the camp kitchen, is the long wooden gallows, where Rudolf Hoess, having confessed and testified and explained, was brought back to be hanged. "I, too, must now be destroyed," he had written. "The world demands it." At Birkenau, a rough stone pathway leads past a series of plaques that attempt to commemorate the dead. "Four million people suffered and died here," they say in a score of languages, "at the hands of the Nazi murderers between the years 1940 and 1945."

It is a great place for wreaths, for official visits by statesmen bearing wreaths. They pause to write worthy sentiments in the official visitors' book. West German Foreign Minister Walter Scheel, who was a Luftwaffe navigator during World War II, was the first German cabinet minister to make the pilgrimage and deposit a wreath. "It will be our task to preserve these highest values—dignity of man, peace amongst people," he wrote in the visitors' book. Gerald Ford was the first American President to come, and two U.S. Marines deposited his wreath of red and white carnations. "This monument . . ." he wrote in the official book, "inspires us further to the dedicated pursuit of peace, cooperation and security for all peoples."

The first Polish Pope, John Paul II, who was studying in his seminary during most of the Auschwitz years, arrived at the camp by means of a white helicopter and then a limousine, its path strewn with flowers. He fell to his knees in prayer. "Peace!" he cried. "Only peace! Only peace!" A reporter who watched the scene was impressed by the TV cables strung along the barbed wire, the souvenir postcards and soft drinks being offered for sale, the way the trees had flourished in the desecrated earth. "The poplars planted by the Nazis to screen the crematoria have grown enormously tall and graceful," he wrote.

The Polish purpose in all this commemoration is to make sure that the world remembers what happened at Auschwitz, and that it learns the lesson of what happened. To Polish officialdom—Josef Cyrankiewicz, who became premier in 1947, had been a prisoner at Auschwitz from 1941 to 1945—what happened and what it meant appeared perfectly clear. That is evident in the plaque mourning "the martyrdom of the Polish nation" and warning against "international fascism."

To others, neither the meaning of the event nor the lesson to be learned from it is quite so obvious. None of us can approach Auschwitz—neither the museum standing in the ruins nor the very idea of the great death camp on the Vistula—without all the intellectual and spiritual burdens that we carry with us. We see Auschwitz and we judge Auschwitz according to the way we see and judge the human race, and life, and God.

Auschwitz was a world unlike any other because it was created and governed according to the principles of absolute evil. Its only function was death. The first question,

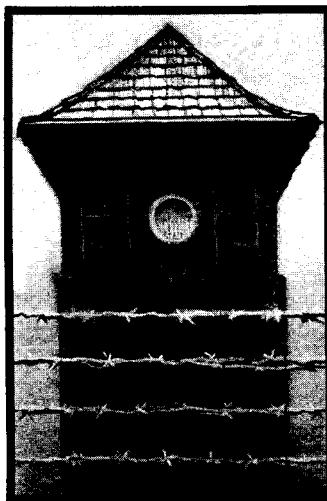
then, is whether we see Auschwitz as the epitome of life itself, an incarnation of the darkest expectations of Machiavelli and Hobbes, or whether we see it as a mirror image of the true life, a Satanic perversion of some divine plan that we have not yet discovered. From that central enigma flow all the lesser contradictions that still bedevil anyone who seeks to understand the mystery of Auschwitz. Did it represent the ultimate evil of the German nation, and was that the evil of German rationality or of German irrationality? Or did it represent, conversely, the apotheosis of Jewish suffering? And was that suffering simply the result of centuries of anti-Semitism, or was it part of the fulfillment of the prophecy that the tormented Jews would someday return to Palestine; return, as Ezekiel had written, to "the land that is restored from the ravages of the sword, where people are gathered out of many nations upon the mountains of Israel"?

It can be argued that Auschwitz proves there is no God, not for the Jews nor for the Catholics nor for the Jehovah's Witnesses, who died as bravely as any others. "If all this was possible," wrote one Hungarian survivor, Eugene Heimler, "if men could be herded like beasts toward annihilation, then all that I had believed in before must have been a lie. There was not, there could not be a God, for he could not condone such godlessness." But such declarations have been made at every moment of extreme crisis by those who see God only in success and happiness. Since all efforts to prove or explain God's purposes demonstrate only the futile diligence of worker ants attempting to prove the existence of Mozart, Auschwitz can just as well prove a merciful God, an indifferent God, or, perhaps best, an unknowable God. William Styron, in *Sophie's Choice*, suggested the answer as a riddle: "'At Auschwitz, tell me, where was God?' The answer is only another question: 'Where was man?'"

The evidence of Auschwitz has demonstrated many things about humanity. It has demonstrated that men (and women) are capable of committing every evil the mind can conceive, that there is no natural or unwritten law that says of any atrocity whatsoever: This shall not

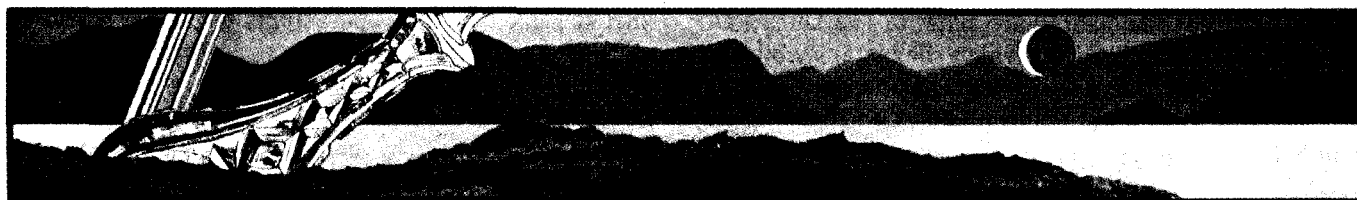
be done. It has demonstrated that men can also bear and accept every evil, and that they will do so in order to survive. To survive, even just from one day to the next, they will kill and let kill, they will rob and betray their friends, steal food rations from the dying, inform on neighbors, do anything at all. The evidence of Auschwitz has demonstrated just as conclusively that men will sacrifice themselves for others. Franciszek Gajnowiczek, for example, is a stooped, gray-haired man, who survived Auschwitz to testify that when he was selected at random for execution one day in 1941, a Franciscan priest named Maximilian Kolbe stepped forward and volunteered to take his place, and did take his place, and did die. The evidence has demonstrated, moreover, that those who are ready to sacrifice themselves for one another, those who share a commitment to some political or spiritual purpose, are as likely to survive as those who make survival their only goal. The evidence, in other words, is as contradictory as human nature itself. "The truth about Auschwitz?" Josef Cyrankiewicz once reflected. "There is no person who could tell the whole truth about Auschwitz."

Elie Wiesel, who managed to survive being sent to Auschwitz as a boy, remembered the place as hellish, but when he returned in 1979, he was overwhelmed by its beauty. "The low clouds, the dense forest, the calm solemnity of the scenery," he wrote. "The silence is peaceful, soothing." When Wiesel tried to decipher the meaning of that serene graveyard, he was helpless. "How was it possible?" he wrote. "We shall never understand. Even if we manage somehow to learn every aspect of that insane project, we will never understand it. . . . I think I must have read all the books—memoirs, documents, scholarly essays and testimonies written on the subject. I understand it less and less." That is the survivor's message on the mystery of survival, but the nameless *dayyan* may have been preaching a richer variation of the same message when he urged the men of the last Sonderkommando not to be afraid but simply to accept the fulfillment of God's incomprehensible will. □



THE PROPHET'S HAIR

A SHORT STORY BY SALMAN RUSHDIE



EARLY IN 19—, WHEN SRINAGAR WAS UNDER THE SPELL of a winter so fierce it could crack men's bones as if they were glass, a young man upon whose cold-pinked skin there lay, like a frost, the unmistakable sheen of wealth was to be seen entering the most wretched and disreputable part of the city, where the houses of wood and corrugated iron seemed perpetually on the verge of losing their balance, and asking in low, grave tones where he might go to engage the services of a dependably professional thief. The young man's name was Atta, and the rogues in that part of town directed him gleefully into ever darker and less public alleys, until in a yard wet with the blood of a slaughtered chicken he was set upon by two men whose faces he never saw, robbed of the substantial bankroll that he had insanely brought on his solitary excursion, and beaten within an inch of his life.

Night fell. His body was carried by anonymous hands to the edge of the lake, whence it was transported by shikara across the water and deposited, torn and bleeding, on the deserted embankment of the canal that led to the gardens of Shalimar. At dawn the next morning a flower vendor was rowing his boat through water to which the cold of the night had given the cloudy consistency of wild honey when he saw the prone form of young Atta, who was just beginning to stir and moan, and on whose now deathly pale skin the sheen of wealth could still be made out dimly beneath an actual layer of frost. The flower vendor moored his craft, and by stooping over the mouth of the injured man was able to learn the poor fellow's address, which was mumbled through lips that could scarcely move; whereupon, hoping for a

large tip, the hawker rowed Atta home to a large house on the shores of the lake, where a painfully beautiful girl and her equally handsome mother, neither of whom, it was clear from their eyes, had slept a wink from worrying, screamed at the sight of their Atta—who was the elder brother of the beautiful girl—lying motionless amid the funereally stunted winter blooms of the hopeful florist. The flower vendor was indeed paid off handsomely, not least to ensure his silence, and plays no further part in our story. Atta himself, suffering terribly from exposure as well as a broken skull, entered a coma that caused the city's finest doctors to shrug helplessly. It was therefore all the more remarkable that on the very same evening the most wretched and disreputable part of the city received a second unexpected visitor. This was Huma, the sister of the unfortunate young man, and her question was the same as her brother's, and asked in the same low, grave tones: "Where may I hire a thief?"

The story of the rich idiot who had come looking for a burglar was already common knowledge in those insalubrious gullies; but this time the girl added, "I should say that I am carrying no money, nor am I wearing any jewels; my father has disowned me and will pay no ransom if I am kidnapped; and a letter has been lodged with the commissioner of police, my uncle, to be opened in the event of my not being safe at home by morning. In that letter he will find full details of my journey here, and he will move Heaven and Earth to punish my assailants." Her extraordinary beauty, which was visible even through the enormous welts and bruises disfiguring her arms and forehead, coupled with the oddity of her inquiries, had attracted a sizable group of curious onlookers, and because her little speech seemed to them to cover just about everything, no one attempted to injure her in any way, although there were some raucous comments to

*Salman Rushdie is the author of the recently published *Midnight's Children*, a novel about India.*

the effect that it was pretty peculiar for someone who was trying to hire a crook to invoke the protection of a high-up policeman uncle. She was directed into ever darker and less public alleys until finally in a gully as dark as ink an old woman with eyes that stared so piercingly that Huma instantly understood she was blind motioned her through a doorway from which darkness seemed to be pouring like smoke. Clenching her fists, angrily ordering her heart to behave normally, the girl followed the old woman into the gloom-wrapped house.

The faintest conceivable rivulet of candlelight trickled through the darkness; following this unreliable yellow thread (because she could no longer see the old lady), Huma received a sudden sharp blow to the shins and cried out involuntarily, after which she instantly bit her lip, angry at having revealed her mounting terror to whatever waited there shrouded in black. She had in fact collided with a low table on which a single candle burned and beyond which a mountainous figure could be made out, sitting cross-legged on the floor. "Sit, sit," said a man's calm, deep voice, and her legs, needing no more flowery invitation, buckled beneath her at the terse command. Clutching her left hand in her right, she forced her voice to respond evenly: "And you, sir, will be the thief I have been requesting?"

Shifting its weight very slightly, the shadow-mountain informed her that all criminal activity originating in this zone was well organized and also centrally controlled, so that all requests for what might be termed freelance work had to be channeled through this room. He demanded comprehensive details of the crime to be committed, including a precise inventory of items to be acquired, also a clear statement of all financial inducements being offered with no gratuities excluded, plus, for filing purposes only, a summary of the motives for the application. At this, Huma, as though remembering something, stiffened in both body and resolve and replied loudly that her motives were entirely a matter for herself; that she would discuss details with no one but the thief himself; but that the rewards she proposed could only be described as "lavish." "All I am willing to say to you, sir, since this appears to be some sort of employment agency, is that in return for such lavish rewards I must have the most desperate criminal at your disposal, a man for whom life holds no terrors, not even the fear of God. The worst of fellows, I tell you—nothing less will do!"

Now a paraffin storm lantern was lighted, and Huma saw facing her a gray-haired giant down whose left cheek ran the most sinister of scars, a cicatrice in the shape of the Arabic letter S. She had the insupportably nostalgic notion that the bogeyman of her childhood nursery had risen up to confront her, because her ayah had always forestalled any incipient acts of disobedience by threatening Huma and Atta: "You don't watch out and I'll send that one to steal you away—that Sheikh Sin, the Thief of Thieves!" Here, gray-haired but unquestionably scarred,

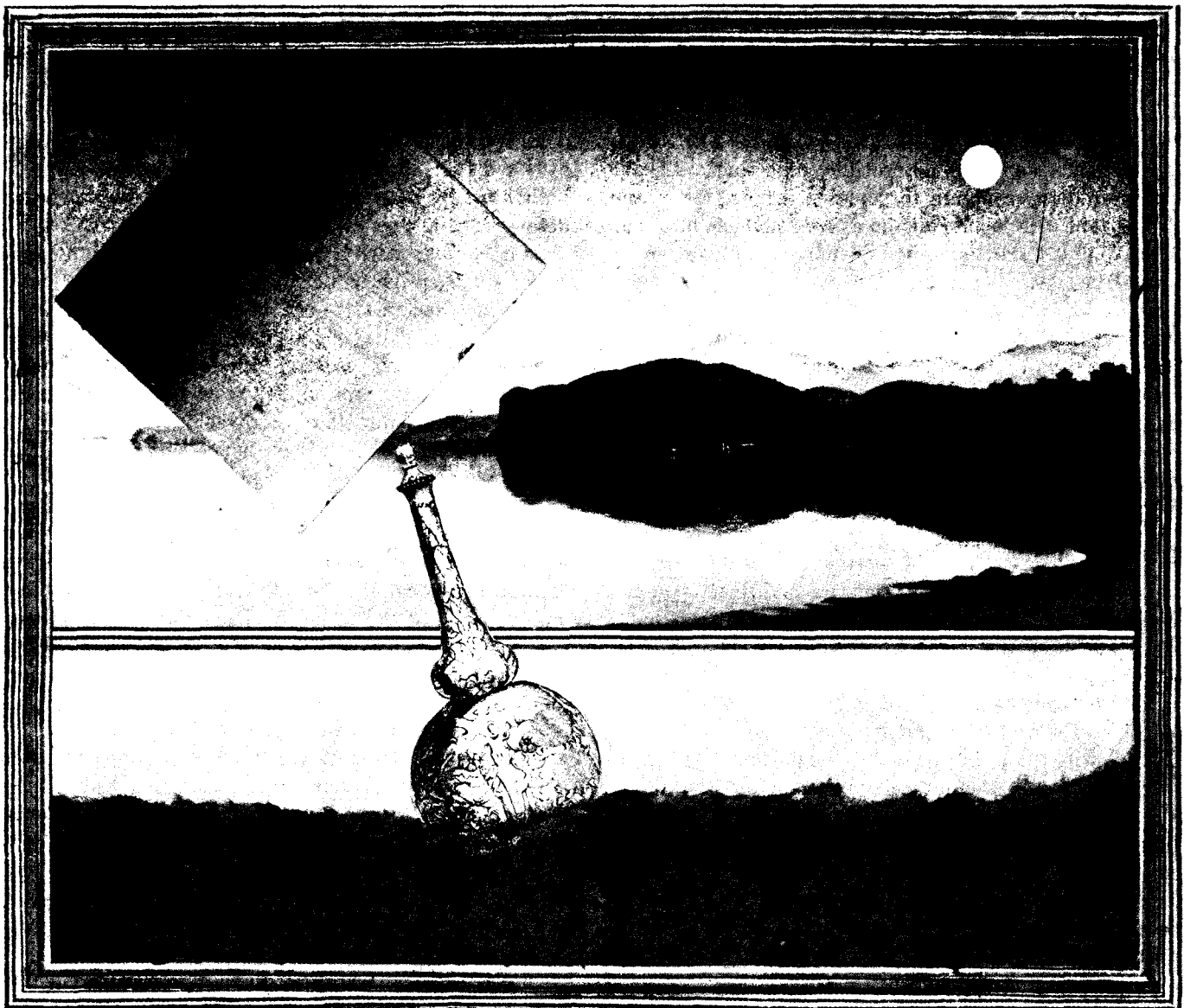
was the notorious criminal himself; and was she crazy, were her ears playing tricks, or had he truly just announced that, given the circumstances, he himself was the only man for the job?

Struggling wildly against the newborn goblins of nostalgia, Huma warned the fearsome volunteer that only a matter of extreme urgency and peril would have brought her unescorted into these ferocious streets. "Because we can afford no last-minute backings-out," she continued, "I am determined to tell you everything, keeping back no secrets whatsoever. If, after hearing me out, you are still prepared to proceed, then we shall do everything in our power both to assist you and to make you rich." The old thief shrugged; nodded; spat. Huma began her story.

SIX DAYS AGO, EVERYTHING IN THE HOUSEHOLD OF HER father, the wealthy moneylender Hashim, had been as it always was. At breakfast her mother had spooned khichri lovingly onto the moneylender's plate; the conversation had been filled with those expressions of courtesy and solicitude on which the family prided itself. Hashim was fond of pointing out that while he was not a godly man he set great store by "living honorably in the world." In that spacious lakeside residence, all outsiders were greeted with the same formality and respect, even those unfortunates who came to negotiate for small fragments of Hashim's great fortune, and of whom he naturally asked an interest rate of 71 percent, partly, as he told his khichri-spooning wife, "to teach these people the value of money; let them only learn that, and they will be cured of this fever of borrowing, borrowing all the time—so you see that if my plans succeed, I shall put myself out of business!" In their children, Atta and Huma, the moneylender and his wife had sought, successfully, to inculcate the virtues of thrift, plain dealing, perfect manners, and a healthy independence of spirit.

Breakfast ended; the family wished one another a fulfilling day. Within a few hours, however, the glassy contentment of that household, of that life of porcelain delicacy and alabaster sensibilities, was to be shattered beyond all hope of repair.

The moneylender summoned his personal shikara and was on the verge of stepping into it when, attracted by a glint of silver, he noticed a small phial floating between the boat and his private quay. On an impulse, he scooped it out of the glutinous water: it was a cylinder of tinted glass cased in exquisitely wrought silver, and Hashim saw within its walls a silver pendant bearing a single strand of human hair. Closing his fist around this unique discovery, he muttered to the boatman that he had changed his plans and hurried to his sanctum where, behind closed doors, he feasted his eyes on his find. There can be no doubt that Hashim the moneylender knew from the first that he was in possession of the famous holy hair of the Prophet Mohammed, whose theft from the



shrine at Hazratbal the previous morning had created an unprecedented hue and cry in the valley. The thieves—no doubt alarmed by the pandemonium, by the procession through the streets of the endless ululating crocodiles of lamentation, by the riots, the political ramifications, and the widespread police search that was commanded and carried out by men whose entire careers now hung upon this single lost hair—had evidently panicked and hurled the phial into the gelatine bosom of the lake. Having found it by a stroke of good fortune, Hashim's duty as a citizen was clear; the hair must be restored to its shrine, and the state to equanimity and peace.

But the moneylender had formed a different notion. All about him in his study was the evidence of collector's mania: great cases full of impaled butterflies from Gulmarg, three dozen miniature cannons cast from the melted-down metal of the great gun Zamzama, innumerable swords, a Naga spear, ninety-four terracotta camels of the sort sold on railway-station platforms, and an

infinite of tiny sandalwood dolls, which had originally been carved to serve as children's bathtime toys. "And after all," Hashim told himself, "the Prophet would have disapproved mightily of this relic-worship; he abhorred the idea of being deified; so by keeping this rotting hair from its mindless devotees, I perform—do I not?—a finer service than I would by returning it! Naturally, I don't want it for its religious value; I'm a man of the world, of this world; I see it purely as a secular object of great rarity and blinding beauty: in short, it's the phial I desire, not the hair. There are American millionaires who buy stolen paintings and hide them away; they would know how I feel. I must, must have it!"

Every collector must share his treasures with one other human being, and Hashim summoned—and told—his only son, Atta, who was deeply perturbed but, having been sworn to secrecy, spilled the beans only when the troubles became too terrible to bear. The youth left his father alone in the crowded solitude of his collections.

Hashim was sitting erect in a hard chair, gazing intently at the beautiful phial.

IT WAS WELL KNOWN THAT THE MONEYLENDER NEVER ate lunch, so it was not until evening that a servant entered the sanctum to summon his master to the dining table. He found Hashim as Atta had left him. The same, but not the same: because now the moneylender looked swollen, distended, his eyes bulged even more than usual; they were red-rimmed and his knuckles were white. It was as though he were on the point of bursting, as though under the influence of the misappropriated relic he had filled up with some spectral fluid that might at any moment ooze uncontrollably from his every bodily opening. He had to be helped to the table; and then the explosion did indeed take place. Seemingly careless of the effect of his words on the carefully constructed and fragile constitution of the family's life, Hashim began to gush, to spume streams of terrible truths. In horrified silence, his children heard their father turn upon his wife, and reveal to her that for many years their marriage had been the worst of his afflictions. "An end to politeness!" he thundered. "An end to hypocrisy!" He revealed to his family the existence of a mistress; he informed them of his regular visits to paid women. He told his wife that, far from being the principal beneficiary of his will, she would receive no more than the eighth portion that was her due under Islamic law. Then he turned upon his children, screaming at Atta for his lack of academic ability: "A dope! I have been cursed with a dope!" and accusing his daughter of lasciviousness, because she went around the city barefaced, which was unseemly for any good Moslem girl to do; she should, he commanded, enter purdah forthwith. He left the table without having eaten and fell into the deep sleep of a man who has got many things off his chest, leaving his children stunned, his wife in tears, and the dinner going cold on the sideboard under the gaze of an anticipatory bearer.

At five o'clock the next morning the moneylender forced his family to rise, wash, and say their prayers; from that time on, he began to pray five times daily for the first time in his life, and his wife and children were obliged to do likewise. Before breakfast, Huma saw the servants, under her father's direction, constructing a great heap of books in the garden and setting fire to it. The only volume left untouched was the Koran, which Hashim wrapped in a silken cloth and placed on a table in the hall. He ordered each member of his family to read passages from this book for at least two hours a day. Visits to the cinema were also forbidden. And if Atta invited male friends to the house, Huma was to retire to her room.

By now, the family had entered a state of wild-eyed horror; but there was worse to come. That afternoon, a

trembling debtor arrived at the house to confess his inability to pay the latest installment of interest owed, and made the mistake of reminding Hashim, in somewhat blustering fashion, of the Koran's strictures against usury. The moneylender, flying into a rage, attacked the fellow with one of his large collection of bullwhips. By mischance, later the same day, a second defaulter came to plead for time, and was seen fleeing Hashim's study with a great gash on his arm, because Huma's father had called him a thief of other men's money and had tried to cut off the fellow's right hand with one of the thirty-eight kukri knives hanging on the study walls. These breaches of the family's laws of decorum alarmed Atta and Huma; and when, that evening, their mother attempted to calm Hashim down, he struck her on the face with an open hand. Atta leaped to his mother's defense and he, too, was sent flying. "From now on," Hashim bellowed, "there's going to be some discipline around here!"

The moneylender's wife began a fit of hysteria that continued throughout the night and the following day, and which so provoked her husband that he threatened her with divorce, at which she fled to her room, locked the door, and subsided into a raga of sniffing. Huma now lost her composure, challenged her father openly, announced (with that same independence of spirit that he had encouraged in her) that she would wear no cloth over her face: apart from anything else, it was bad for the eyes. On hearing this, her father disowned her at once and gave her one week in which to pack her bags.

By the fourth day, the fear in the air of the house had become so thick that it was difficult to walk around. Atta told his shock-numbered sister: "We are descending to gutter-level—but I know what must be done."

That afternoon, Hashim left home accompanied by two hired thugs to extract the unpaid dues from his two insolvent clients. Atta went immediately to his father's study. Being the son and heir, he possessed his own key to the moneylender's safe, which he now used, and removing the little phial from its hiding-place, he slipped it into his trouser pocket and relocked the safe door.

Now he told Huma the secret of what his father had found in Lake Dal, and cried, "Maybe I'm crazy—maybe the awful things that are happening have made me cracked—but I am convinced there will be no peace in our house until this hair is out of it." His sister instantly agreed that the hair must be returned, and Atta set off in a hired shikara to the Hazratbal mosque. Only when the boat had delivered him into the throng of the distraught faithful that was swirling around the desecrated shrine did Atta discover that the relic was no longer in his pocket. There was only a hole, which his mother, usually so attentive to household matters, must have overlooked under the stress of recent events . . . Atta's initial surge of chagrin was quickly replaced by a feeling of profound relief. "Suppose," he imagined, "I had already announced

to the mullahs that the hair was on my person! They would never have believed me now—and this mob would have lynched me! At any rate, it's gone, and that's a load off my mind." Feeling more contented than he had for days, the young man returned home.

Here he found his sister bruised and weeping in the hall; upstairs, in her bedroom, his mother wailed like a brand-new widow. He begged Huma to tell him what had happened, and when she replied that their father, returning from his brutal business trip, had once again noticed a glint of silver between boat and quay, had once again scooped up the errant relic, and was consequently in a rage to end all rages, having beaten the truth out of her—then Atta buried his face in his hands and sobbed that, in his opinion, that hair was persecuting them; that it had come back to finish the job.

Now it was Huma's turn to think of a way out of their troubles. While her arms turned black and blue and great stains spread across her forehead, she hugged her brother and whispered to him her determination to get rid of the hair *at all costs*; she repeated this last phrase several times. "The hair," she then declared, "must be stolen. It was stolen from the mosque; it can be stolen from this house. But it must be a genuine robbery, carried out by a real thief, not by one of us who are the hair's victims—by a thief so desperate that he fears neither capture nor curses." Of course, she added, the theft would be ten times harder to pull off now that their father, knowing that there had already been one attempt on the relic, was certainly on his guard.

"CAN YOU DO IT?" HUMA, IN A ROOM LIT BY CANDLE and storm lantern, ended her account with this question: "What assurances can you give that the job holds no terrors for you still?" The criminal, spitting, stated that he was not in the habit of providing references, as a cook might, or a gardener; but he was not alarmed so easily, not by any children's *djinn* of a curse. The girl had to be content with this boast, and proceeded to describe the details of the proposed burglary. "Since my brother's failure to restore the hair to the mosque, my father has taken to sleeping with his precious treasure under his pillow. However, he sleeps alone and very energetically; only enter his room without waking him, and he will certainly have tossed and turned quite enough to make the theft a simple matter. When you have the phial, come to my room," and here she handed Sheikh Sin a plan of her home, "and I will hand over all the jewelry owned by my mother and myself. You will find—it is worth—you will be able to get a fortune for it. . . ." It was clear that her self-control was weakening and that she was on the point of physical collapse. "Tonight," she burst out finally. "You must come to-night!"

No sooner had she left the room than the old criminal's

body was convulsed by a fit of coughing; he spat blood into an old tin can. The great sheikh, the "Thief of Thieves," was also an old and sick man, and every day the time drew nearer when some young pretender to his power would stick a dagger in his stomach. A lifelong addiction to gambling had left him as poor as he had been when, decades ago, he had started out in this line of work as a mere pickpocket's apprentice; in the extraordinary commission he had accepted from the moneylender's daughter he saw his opportunity of amassing enough wealth, at a stroke, to leave the valley and acquire the luxury of a respectable death that would leave his stomach intact.

As for the Prophet's hair, well, neither he nor his blind wife had ever had much to say for prophets; that was one thing they had in common with the moneylender's clan. It would not do, however, to reveal the nature of this, his last crime, to his four sons; to his consternation, they had all grown up into hopelessly devout fellows, who even spoke absurdly of making the pilgrimage to Mecca some day. "But how will you go?" their father would laugh at them, because, with the absolutist love of a parent, he had made sure they were all provided with a lifelong source of high income by crippling them at birth, so that, as they dragged themselves around the city, they earned excellent money in the begging business. The children, then, could look after themselves; he and his wife would be off with the jewel boxes of the moneylender's women. It was a timely chance indeed that had brought the beautiful bruised girl into his corner of the town.

THAT NIGHT, THE LARGE HOUSE ON THE SHORE OF the lake lay blindly waiting, with silence lapping at its walls. A burglar's night: clouds in the sky and mists on the winter water. Hashim the moneylender was asleep, the only member of his family to whom sleep had come that night. In another room, his son, Atta, lay deep in the coils of his coma with a blood clot forming on his brain, watched over by a mother who had let down her long graying hair to show her grief, a mother who placed warm compresses on his head with gestures redolent of impotence. In yet a third bedroom Huma waited, fully dressed, amid the jewel-heavy caskets of her desperation. At last a bulbul sang softly from the garden below her window and, creeping downstairs, she opened a door to the bird, on whose face there was a scar in the shape of the Arabic letter S. Noiseless now, the bird flew up the stairs behind her. At the head of the staircase they parted, moving in opposite directions along the corridor of their conspiracy without a glance at one another.

Entering the moneylender's room with professional ease, the burglar, Sin, discovered that Huma's predictions had been wholly accurate. Hashim lay sprawled diagonally across his bed, the pillow untenanted by his

head, the prize easily accessible. Step by padded step, Sin moved toward the goal. It was at this point that young Atta, without any warning, his vocal cords prompted by God knows what pressure of the clot upon his brain, sat bolt upright in his bed, giving his mother the fright of her life, and screamed at the top of his voice: "Thief! Thief! Thief!"

It seems probable that his poor mind had been dwelling, in these last moments, upon his own father, but it is impossible to be certain, because having uttered these three emphatic words the young man fell back on his pillow and died. At once his mother set up a screeching and a wailing and a keening and a howling so ear-splittingly intense as to complete the work that Atta's cry had begun; that is, her laments penetrated the walls of her husband's bedroom and brought Hashim wide awake.

Sheikh Sin was just deciding whether to dive beneath the bed or brain the moneylender good and proper when Hashim grabbed the tiger-striped swordstick that always stood propped up in a corner beside his bed and rushed from the room without so much as noticing the burglar who stood on the opposite side of the bed in the darkness. Sin stooped quickly and removed the phial containing the Prophet's hair from its hiding place.

Meanwhile Hashim had erupted into the corridor, having unsheathed the sword inside his stick; he was waving the blade about dementedly with his right hand and shaking the stick with his left. Now a shadow came rushing toward him through the midnight darkness of the passageway and, in his somnolent anger, the moneylender thrust his sword fatally through its heart. Turning up the light, he found that he had murdered his daughter, and under the dire influence of this accident he found himself so persecuted by remorse that he turned the sword upon himself, fell upon it, and so extinguished his life. His wife, the sole surviving member of the family, was driven mad by the general carnage and had to be committed to an asylum for the insane by her brother, the city's commissioner of police.

Sheikh Sin quickly understood that the plan had gone awry; abandoning the dream of the jewel boxes when he was but a few yards from its fulfillment, he climbed out of Hashim's window and made his escape during the awful events described above. Reaching home before dawn, he woke his wife and confessed his failure; it would

be necessary, he said, for him to vanish for a while. Her blind eyes never opened until he had gone.

The noise in the Hashim household had roused their servants and even awakened the night watchman who had been fast asleep as usual on his charpoy by the gate; the police were alerted and the commissioner himself informed. When he heard of Huma's death, the mournful officer opened and read the sealed letter that his niece had given him, and instantly led a large detachment of armed men into the light-repellent gullies of the most wretched and disreputable part of the city. The tongue of a malicious cat burglar named Huma's fellow-conspirator; the finger of an ambitious bank robber pointed at the house in which he lay concealed; and although Sin managed to crawl through a hatch in the attic and attempt a rooftop escape, a bullet from the commissioner's own rifle penetrated his stomach and brought him crashing messily to the ground at the feet of the enraged uncle. From the dead man's ragged pocket rolled a phial of tinted glass, cased in filigree silver.

THE RECOVERY OF THE PROPHET'S HAIR WAS ANNOUNCED at once on All-India Radio. One month later, the valley's holiest men assembled at the Hazratbal mosque and formally authenticated the relic. It sits to this day in a closely guarded vault by the shores of the loveliest of lakes in the heart of the valley that is closer than any other place on earth to Paradise.

But before its story can properly be concluded, it is necessary to record that when the four sons of the dead sheikh awoke on that morning of his death, having unwittingly spent a few minutes under the same roof as the holy hair, they found that a miracle had occurred, that they were all sound of limb and strong of wind, as whole as they might have been if their father had not thought to smash their legs in the first hours of their lives. They were, all four of them, very properly furious, because this miracle had reduced their earning powers by 75 percent, at the most conservative estimate; so they were ruined men.

Only the sheikh's widow had some reason for feeling grateful, because although her husband was dead, she had regained her sight, so that it was possible for her to spend her last days gazing once more upon the beauties of the valley of Kashmir. □

THE VOTER

BY EDWARD SOREL

IN '64 I VOTED FOR JOHNSON BECAUSE HE PROMISED PEACE.



BUT HE BETRAYED ME. HE ESCALATED THE WAR!



IN '68 I VOTED FOR NIXON BECAUSE HE PROMISED AN END TO BIG GOVERNMENT.



BUT I WAS FOOLED AGAIN. HE BUGGED PHONES, OPENED MAIL AND DOUBLED THE WHITE HOUSE STAFF.



IN '76 I VOTED FOR CARTER BECAUSE HE PROMISED TO CUT MILITARY EXPENDITURES.



BUT INSTEAD HE KEPT RAISING THE MILITARY BUDGET YEAR AFTER YEAR!



FINALLY I FIGURED IT OUT! I REALIZED THAT POLITICIANS ALWAYS DO THE OPPOSITE OF WHAT THEY PROMISE.



SO I VOTED FOR REAGAN.



BUT HE'S DOING EXACTLY WHAT HE SAID HE'D DO!!





How do you preserve confusion?

THE FIGHT TO SAVE BIG SUR

BY ANTHONY BRANDT

EVERY HOUR OF THE DAY AT BIG SUR HAS ITS BEAUTY, but the best time is probably the late afternoon. You can sit on the terrace at Nepenthe, the restaurant that in a previous incarnation was Rita Hayworth's hideaway cabin, sipping English tea or Irish coffee, and watch the rich slanting light color the hills stretching away to the south: deep greens on the lower elevations, where there are redwoods or Monterey pines; lighter greens higher up in the chaparral; and on the crests, covered with dry grass, a dominating tawny yellow turning slowly in the fading light to gold. "Lion-colored hills," the poet Robinson Jeffers called them, and in fact mountain lions still inhabit them. To the west, sunlight glitters on the immense expanse of the Pacific. Cormorants skim the tops of the long Pacific swells. The farthest hills are thirty miles away and half lost in mist, like the hills in a Chinese landscape painting. Pieces of fog drift up and over canyon walls. The land declines from elevations of 3,000 feet or more and plunges into the water.

Sit there and watch as the light slowly fades; it will become very still, with the kind of stillness that the sound of the waves breaking endlessly against the rocks, or the movement of the wind through the trees, only seems to deepen. It may become so still, indeed, as to approach a kind of absolute, as if the earth itself were lost in meditation. "Out yonder they may curse, revile and torture one another," wrote Henry Miller, "defile all the human instincts, make a shambles of creation (if it were in their power), but here, no, here it is unthinkable, here there is abiding peace, the peace of God. . . ." Big Sur: without question it is a place apart, a place too transcendently beautiful, too much of the spirit, to be mere land. Miller, who lived in Big Sur from 1944 until 1960, did not hesitate to call it paradise.

Now, twenty-one years later, Miller's paradise stands in danger of being lost. About 3 million visitors a year drive down the Coast Highway from Carmel or up from the Hearst castle at San Simeon to see it; that's more people than visit Yosemite in a year. Most of the visitors

pass through and leave no mark, but an increasing number of people mean to live there. Areas that were once almost empty are now close to saturated—to the extent that land this rugged can be saturated—with housing. The price of land has doubled and redoubled in the past few years, and local landowners are under great pressure to sell. The rich have bought land and built houses, usually on the tops of ridges, where the best views are; more and more road cuts, in consequence, are scarring the hillsides.

The situation is serious enough to have aroused a good deal of controversy recently. In 1977, the photographer Ansel Adams, who lives nearby in Carmel Highlands, suggested that Big Sur be made a national park, along the lines of the Cape Cod National Seashore, in order to protect it from further development. Residents vigorously opposed the idea, which went through various permutations before it was embodied in formal legislative proposals early in 1980. In the waning days of the Carter Administration, the residents prevailed and the legislation was shelved. But the deeper issues have not been resolved. Local control has seldom proved to be adequate to inhibit development, and the forces of development, in Big Sur and elsewhere, seem to be gathering strength. Adams and other environmentalists speak fearfully about the possibility of huge hotel/resort complexes being built on one or more of the economically marginal cattle ranches that occupy much of the privately held land in the area. They speak even more fearfully about the damage the Reagan Administration might do. About two thirds of the land along the Big Sur coast is national forest land, part of Los Padres National Forest. If, as the administration proposes, federal land is made more widely available to logging and mining interests, Big Sur may become a prime target for development. Once, gold attracted miners; now other minerals beckon. The remaining stands of redwoods may be worth cutting.

But the most valuable asset here is beauty. This powerful yet serene landscape is ripe with it; and beauty is as marketable as any other commodity. It's also very easily bruised. One large, inappropriate resort, two or three or four more road cuts, and the power and the serenity will disappear. That prospect is what frightens Ansel Adams

Anthony Brandt, a freelance writer, is at work on a book about the American Dream.

ILLUSTRATIONS BY BENNO FRIEDMAN

ELECTRONIC REPRODUCTION PROHIBITED

and his allies. It will take a great deal of self-restraint to preserve Big Sur in the absence of a protective federal designation such as Adams proposed. Only a little more development will be enough to drive the peace from this place forever.

THE ORANGES OF HENRY MILLER

That Big Sur should have come to this dangerous turning point is to a considerable degree the unintended consequence of the love that one man, Henry Miller, felt for it. The place is beautiful enough to have attracted attention without him, but he created the myth of Big Sur.

Miller came to Big Sur in 1944, after many years of impoverished exile in Europe and a few years of unhappy wandering around America. It evoked for him images of Tibet, which he had long wanted to visit; living in Big Sur was dirt-cheap; the people were friendly: he decided to settle. At the time, the entire coastline below Carmel Highlands, a stretch extending more than seventy miles to San Simeon, had no more than several hundred inhabitants. It was known, insofar as it was known at all, as "Jeffers country." Robinson Jeffers still lived then in his stone tower in Carmel; he had been writing about the area since the 1920s. But while Jeffers's work was very popular in the 1920s and 1930s, it had never attracted tourists to Big Sur. For one thing, the Coast Highway, which provided access to the area, wasn't finished until 1937 (eighteen years after it was begun). For another, Jeffers's long, melodramatic poems were so odd, so obsessed with incest and other forbidden acts, and so shockingly contemptuous of humanity as almost to bury his precise and powerful renderings of the Big Sur environment. Jeffers obviously loved Big Sur, but his sense of it was Homeric; he made it a background for his bloody, primitivistic sagas. That sort of thing doesn't attract tourists. Paradise does.

Henry Miller had none of Jeffers's dour austerity about him, and, in spite of his reputation as an outrageous sexual profligate, he exuded a kind of innocence. He loved people and was optimistic about them. He was open, generous with the very little he had, exuberant—and, in the late 1940s, slowly becoming famous. Already well-known in Europe, he was becoming better-known in America as returning GIs smuggled copies of *Tropic of Cancer* and *Tropic of Capricorn* into the country. In 1947, an article provocatively entitled "The New Cult of Sex and Anarchy" appeared in *Harper's*; it was all about Miller and his supposed large bohemian following, living in tents and shacks in the Big Sur canyons. The newspapers picked up on the "Henry Miller colony," as did growing numbers of would-be bohemians and other assorted drifters, who showed up at Miller's door at all hours of the day and night, begging for shelter, for Miller to read their manuscripts, for instructions on how to lead the romantic life of an outlaw artist and writer. Miller, it

must be said, while he found this kind of attention distracting, managed to encourage it. According to his biographer, Jay Martin, he frequently wore a long robe belted at the waist and a coolie hat and carried a gnarled walking stick, as if he were Lao Tzu himself. He was not averse to shedding his robe and wearing nothing but a jockstrap. "Sex and anarchy" may be limiting terms for the culture of Big Sur (Miller loved Ping-Pong, and many perfectly respectable Big Sur old-timers remember playing the game with him), but it certainly wasn't like life in Levittown. In 1951, even so staid a magazine as *Family Circle* joined the fun, titillating its readers with a portrait of Miller in Big Sur. The Big Sur mystique had been born.

Miller's book *Big Sur and the Oranges of Hieronymus Bosch*, published in 1957, did nothing to deflate it. A charming hodgepodge of reminiscences, celebrations of his neighbors, complaints about the amount of mail he received, accounts of daily life in Big Sur, and advice on how to live, the book is held together by an image that runs through the text from beginning to end: the image of paradise. "This," Miller wrote, "is the California that men dreamed of years ago, this is the Pacific that Balboa looked out on from the Peak of Darien, this is the face of the earth as the Creator intended it to look." "It may indeed be the highest wisdom," he said, "to elect to be a nobody in a relative paradise such as this rather than a celebrity in a world which has lost all sense of values." The oranges of the title are from *The Millennium* of Hieronymus Bosch, a painting depicting the earthly paradise in which the fruits are wonderfully outsized. Big Sur, Miller said, was such a place: a utopia, a community filled with kindness and tolerance, where people could live virtually without money, a place for people who, dissatisfied with conventional American mores, wanted to experiment with the unconventional. "Utterly disillusioned, this new breed of experimenter is resolutely turning his back on all that he once held true and viable, and is making a valiant effort to start anew. Starting anew, for this type, means leading a vagrant's life, tackling anything, clinging to nothing, reducing one's needs and one's desires, and eventually—out of a wisdom born of desperation—leading the life of an artist." The life of an artist. In paradise. What could be more attractive?

After the publication of *Big Sur and the Oranges*, the media took renewed interest in Big Sur. *Life* ran a big picture spread of the photogenic coastline. It published, among others, photographs of Miller's children Val and Tony gazing out over a thirty-mile sweep of ocean and mountains, of Miller himself sharing a joke with some of his friends at Nepenthe, and of a painting class with a nude model prominent in the foreground. The Beat Generation also discovered Big Sur: Lawrence Ferlinghetti bought a cabin in Bixby Canyon; Jack Kerouac stayed in it a few days, went half crazy from the solitude, and shortly thereafter wrote a novel called *Big Sur*. All of

this was not lost upon the public. By 1961, when Kerouac's novel came out, the tourist traffic had more than doubled over that of ten years earlier. Henry Miller had left Big Sur; publication of *Tropic of Cancer* in the United States, and the subsequent uproar, made the rush of the curious to his now well-known door impossible to bear. He wound up living in Pacific Palisades with one of his ex-wives.

The tourists prompted further changes. In 1961, the California State Division of Highways proposed to straighten the Coast Highway, widen it from two lanes to four, and do away with the graceful, rather daring wooden bridges that spanned the canyons. The plan was to fill in the canyons instead. Residents, led by the architect Nathaniel Owings, of Skidmore, Owings & Merrill, and his wife, Margaret, a well-known conservationist, who live in an A-frame on the coast about a mile below Nepenthe, scotched that idea by drawing up a master plan for the area and persuading the county board of supervisors to adopt it. Every effort to preserve Big Sur, however, seemed only to increase the traffic. *Time* reported on the master plan and quoted Nathaniel Owings as saying, "There's a lot of loose talk about this being the most beautiful spot in the world. Well, it is." In 1965, the Sierra Club published a folio volume called *Not Man Apart*, consisting of lines of poetry from Robinson Jeffers and photographs of the coast by such luminaries as Ansel Adams, Edward Weston, Philip Hyde, and Eliot Porter. David Brower wrote on the jacket flap, "We needed a book about this country, its meaning reinforced by Jeffers. We hope it will remind those who already know it how splendid a place it is, or bring an intimation of that splendor to those who have never been there, encouraging them, not too many at a time, to seek it out." The photographs in the book are gorgeous, the lines from Jeffers very well chosen. Not too many at a time? The tourists were coming in armies, Winnebago after Winnebago, hundreds of thousands of them.

Tourists, then hippies: Miller's image of Big Sur, of paradise, joyous freedom, religious mysticism of no recognizable kind, drew hordes of them. They lived anywhere, in vans or decrepit old VW campers by the side of the road, on the beach when the state park rangers let them, in abandoned cabins back in the canyons. For a while, a group of them came every day to one of the numerous hairpin turns on the highway where cars are forced to slow down; they carried a big sign that said, "Food, Money, Dope Cheerfully Accepted," and sat there most of the day smiling benignly at passing motorists, obviously stoned. They soon became a tourist attraction in their own right. Meanwhile, at the Esalen Institute, about fifteen miles south of Nepenthe, the human-potential movement found a home. The middle class came there to shed hang-ups and inhibitions—and clothes; to bathe nude in the famous sulfur baths where the sexes mingled freely; and to run the gauntlet of Fritz Perls's

gestalt encounter groups. The Arica Institute, dedicated to expanding the mind at a few thousand dollars a shot, rented houses on Pfeiffer Ridge and Partington Ridge. Big Sur became a cultural hot spot of the late 1960s and early 1970s, a "laundromat for karmas," as one local resident put it. Did you want to find yourself? You made the pilgrimage to Big Sur. There, if anywhere, it seemed in those euphoric times, you could drop your masks, one by one, and, in the mirror of that purifying landscape, see for the first time the face you had before you were born.

Now the hippies are gone, the tourists pass through in constantly increasing multitudes, and the cult of sex and anarchy has given way to the cult of the view. High up on the ridges and morros, 2,000 feet or so above sea level, above the fog line, in the lion-colored hills, the rich buy land that used to sell for a few hundred dollars an acre or even less (For who would ever want to live in this remote, inaccessible country? the old-timers asked) for \$10,000 or \$15,000 an acre or even more, find water if they're lucky, get a permit to build from the California Coastal Commission if their luck holds, spread a house out on the land California-style. They will put up a tennis court, install a swimming pool in the unlikely event there's really a lot of water, a hot tub if there's not, and enjoy the view. "You couldn't buy a view like this," Henry Miller said once in an interview. Oh, yes, you can. With enough money you can indeed buy this view, thirty or forty miles in each direction, the mountains folding into one another, the fog, the rounded hills receding into the far distance, falling into the ocean. You catch your breath at this view. Some hardness in you, whatever walls you off from the world, drops away. "On rising I would go to the cabin door and, casting my eyes over the velvety, rolling hills, such a feeling of contentment, such a feeling of gratitude was mine," Miller wrote at the end of his book, "that instinctively my hand went up in benediction. Blessings! Blessings on you, one and all!"

The velvety, rolling hills, the remarkable beauty, are Big Sur's ultimate fact, far transcending its brief history of human habitation. Henry Miller created an image of Big Sur as a kind of paradise and set that history in motion, but the image, ironically, is barely adequate to the fact. The place is indeed blessed.

THE VISION OF ANSEL ADAMS

How, then, shall it be preserved?

To a certain extent it preserves itself, as residents are fond of pointing out. Paradise is full of traps for the unworthy. A great deal of the land can't be built upon; there's no water, or it's too steep, or the soil won't take a septic system or is too unstable. There are very few roads into the mountains, and those are so narrow, winding, and precipitous as to terrify the ordinary casual motorist. One longtime resident, heir to a California railroad fortune, who wanted to get away from his mother, built

his house at the very top of Partington Ridge Road because he knew the drive up the road would discourage her from visiting. Sure enough, after the first visit she seldom returned. Even the Coast Highway is dangerous, especially in the fog; on the ocean side it often drops 400 or 500 feet straight down from the shoulder. Hit a curve a little too fast and you'll find yourself airborne.

The residents have a way of discouraging the kind of intrusive tourism that turns so many other beautiful places into garbage dumps. Most of the roads off the highway are private and gated, and the gates are locked. Signs are in short supply; the road to Pfeiffer Beach, for example, which is part of Pfeiffer-Big Sur State Park, is unmarked. Thousands of tourists drive by and never find it. Other beaches have no access at all; you have to bush-whack to get to them, through terrain infested with rattlesnakes, poison oak, and other hazards.

Everyone involved, including the residents, the environmentalists who regard Big Sur as a national treasure, even the tourists, wants to keep Big Sur this way, rugged and inaccessible, forever on the verge, as it were, of being discovered. The question is how. The residents think they can do it on their own, without interference from anyone, in the traditional American fashion.

Ansel Adams thinks otherwise. He is seventy-nine now, famous and influential, recently the subject of a retrospective at the Museum of Modern Art and a cover story in *Time*. He has been an environmentalist since long before the persuasion became popular. He served on the board of the Sierra Club for nearly forty years, only to resign in 1971 on the grounds that the club was becoming one-sided and unreasonable; he has since joined the Wilderness Society, whose executive director, William Turnage, was once Adams's business manager. Adams has taken many photographs of the Big Sur coast, and he knew Robinson Jeffers and photographed him outside his rock home in Carmel. In short, Adams has for years been a close neighbor to Big Sur, a man who feels involved in its destiny. Rich in years and awards, he dreamed of doing one more great work: saving Big Sur.

He felt he had ample reason to be concerned about its future. Lake Tahoe was destroyed before his eyes; this beautiful mountain-fringed lake, he says, suffered a "total reversal" and became virtually urbanized within three years. "The dangerous thing is, these developments escalate in a geometrical way," Adams says. He cites a similar dramatic change in Capistrano, on the coast below Los Angeles, and he claims that several places in Big Sur are suitable for large developments. "It scares the life out of me."

In 1977, when he first proposed to William Turnage that something be done about Big Sur, Adams anticipated no major opposition to whatever proposal Turnage drew up. Adams was at the height of his influence, he had access to the President (in 1979 he photographed Jimmy Carter in the White House and used the occasion to lobby

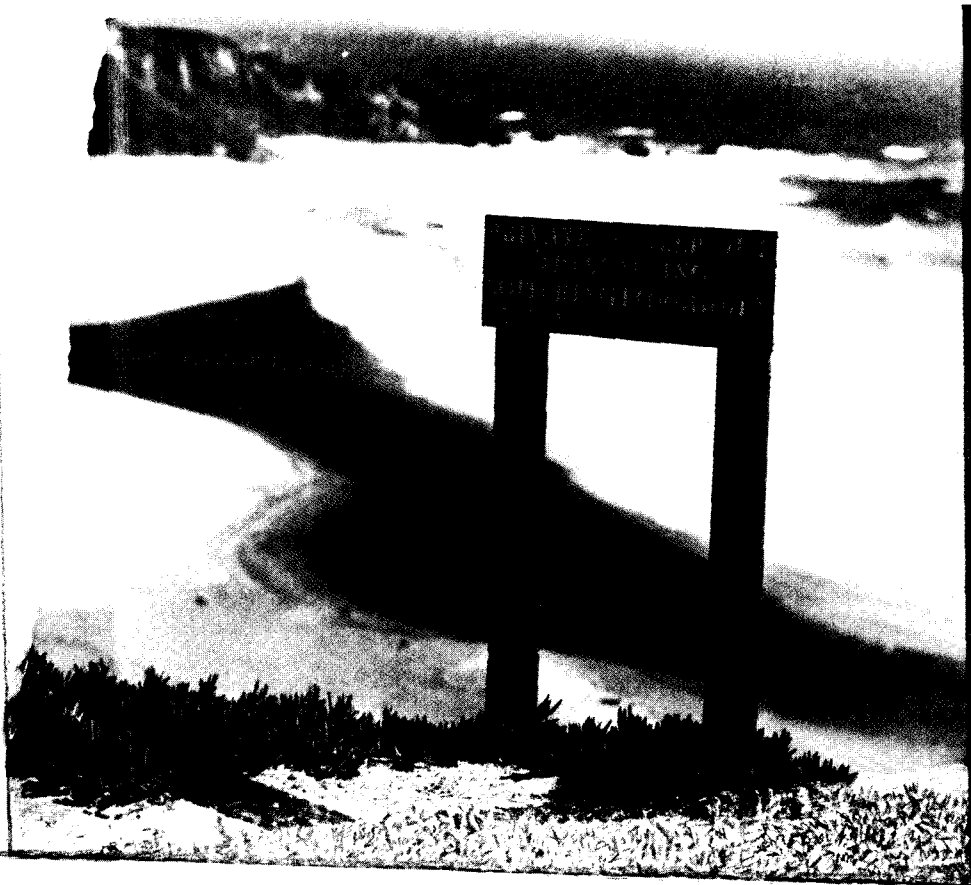
for Big Sur), and the Big Sur community, everyone agreed, was no community at all but a widely scattered bunch of rabid individualists who could never unite to oppose anything. Adams and several other wealthy, prominent citizens formed the Big Sur Foundation, to make studies of the coast and to lobby for the legislation that was eventually proposed. He enlisted the support of the local representative, Leon Panetta, and of Alan Cranston, one of California's senators. Everything went well at first, and Adams made no effort, because none seemed necessary, to persuade the Big Sur "community" that a Big Sur National Seashore or a Big Sur National Scenic Area was the only way to preserve Big Sur.

The residents are, to be sure, a heterogeneous lot, at least on the surface. A small proportion are natives, the descendants of pioneer families who came to Big Sur in the nineteenth century: the Trotters, the Posts, the Pfeiffers, the Harlans, a few others. Most of them are land-poor; with escalating real estate values, they're hard put to pay federal estate taxes when someone dies, and the temptation to sell pieces of land is great. A slightly larger percentage consists of people who have lived in the area for twenty or thirty years, in some cases longer—long enough to be accepted by the natives, in other words, but not long enough to be natives themselves. Some of these people are land-poor too. Kate Healey, for example: the daughter of Giles Healey, a well-known anthropologist, film-maker, and explorer, she inherited about a hundred acres of land and a cluttered but pleasant house on Partington Ridge, where she lives surrounded by pigs, chickens, geese, an enormous old rooster, and numerous dogs and cats. She is trying to farm and be self-sufficient; there are very few ways to make money in Big Sur. It's clearly a struggle. The hundred acres include the site of a house that burned down. The site is magnificent, commanding one of the most spectacular views on the coast. No permit would be required to rebuild the house. She could sell the site and a few surrounding acres and practically retire on the proceeds, but she would have altered her farm entirely. "Where would I go?" she asks. Loving the land is costly in Big Sur.

Together the natives and near-natives such as Kate Healey make up about a third of the population and are its core. Other groups include the people who live and/or work at Esalen; artists and writers surviving from the Henry Miller era; the young men and women who work at Nepenthe, the Ventana Inn, the River Inn, and similar establishments; a few retired people; the rich newcomers, buying and selling houses that may cost as much as \$800,000; and finally the marijuana farmers, aging, wised-up hippies who employ the latest agricultural techniques to produce, back in the maze of canyons in Los Padres National Forest, some of the finest sinsemilla (top-grade marijuana made from seedless flower buds) in California, with single plants bringing as much as \$2,000. ("Marijuana," says one of the state troopers who patrols



PRODUCED BY UNIT 005
ELECTRONIC REPRODUCTION PROHIBITED



the Big Sur area, "is the biggest cash crop in Monterey County.")

A mixed bag, indeed. They don't often socialize together; many of them don't own land; a good many, like the people working at the various inns, are essentially transients, rarely staying longer than a year; the rich generally don't live there year-round; the marijuana farmers, for obvious reasons, stick to themselves. And most of them have bought the Big Sur mystique. Big Sur is definitely where you come to "be yourself"; a benign but determined individualism is rampant here. Tootie Trotter, a lioness from one of the oldest families, who runs the grocery store at the Ventana Inn, is proud of having grown up without radio, television, or any of the other standard amusements, and is careful to distinguish herself from the rest of Big Sur. "There are two different Big Surs," she says. "The state-of-mind Big Sur—and me." In other words, the natives too are rabid individualists; individualism, in fact, is the only thing these people have in common. It makes Big Sur an interesting place. But it's certainly not the stuff out of which political power comes.

Imagine the surprise of the Adams forces, then, when, as they began to make their moves, opposition developed in Big Sur immediately and in strength. The first move came when Representative Leon Panetta tried to tack on to an omnibus parks bill in 1978 a rider that would have authorized the Interior Department to study ways of preserving Big Sur. Big Sur residents heard about it, organized, and got a significant proportion of residents to sign a petition urging Panetta to drop his plan. Panetta dropped the plan. Alan Cranston made the next move, in January of 1980, suggesting an amendment to another omnibus parks bill which would have removed a limit to the amount of land the Forest Service could add to Los Padres National Forest; in effect, the amendment would have authorized the Forest Service to acquire most of the 75,000 acres in Big Sur still in private hands. This time the response was even greater; Cranston's office received some 2,000 letters, telegrams, and phone calls opposing the proposal, and he withdrew it.

This was just the beginning. In February, the Wilderness Society, under William Turnage's direction, proposed that the government make Big Sur the nation's first National Scenic Area. Turnage's idea was that the Forest Service should manage the area, that all development should be stopped, and that the Forest Service should acquire land where necessary, or scenic easements where not, in order to clear the view of all trace of human habitation. In April, Alan Cranston introduced a bill in the Senate to implement the Wilderness Society proposal. In June, Leon Panetta introduced his own bill to place Big Sur under federal control.

The net effect of these actions was to consolidate the residents of Big Sur into a community of interests, if not a genuine community. All those rabid individualists

could agree on one thing: they didn't want federal control in Big Sur. It was antithetical to the whole idea of the place. To make a park out of it, or any kind of programmed experience, with historical markers, tour buses, roadside signs, rangers, would be to destroy the meaning of the place, if not the place itself, forever. "There's a quality of confusion here that doesn't look like a national park," Nathaniel Owings says. "That's how you know you're in Big Sur." To protect the "quality of confusion," these diverse groups could finally unite.

And to protect their land. Federal control meant the loss of land, some of it extremely valuable. A few individuals, to be sure, stood to gain; they owned land that couldn't be built upon, therefore land that couldn't be sold. If the federal government came in, they had a customer at last. But for most, a forced sale to the government, even at currently inflated values, meant not only the loss of their homes but the loss of a major investment, which in some cases had multiplied in value by a factor of five or even ten in just a few years.

Organization of the Big Sur community to oppose the two bills was primarily the work of Gary Koeppel, who owns the Coast Gallery in Big Sur and publishes the *Big Sur Gazette*, and Jim Josoff, who with a friend runs a business out of their home, Sur House, a charming, weatherbeaten old house overlooking the coast. Koeppel became the local propagandist, using the *Gazette* to attack the Cranston and Panetta bills with increasing rancor. His opponents say that he consistently misrepresented their position and played on the residents' worst fears. Adams, who became a convenient target for Koeppel because of his fame, has little respect for him, and Adams is a generous-minded man.

He has much more respect for Jim Josoff. A tall, thick-set man, who if he were rougher in appearance might be called bearish, Josoff is an extremely effective, though untrained, organizer. He ran, and was the chief spokesman for, the Friends of the Big Sur Coast, the vehicle for raising money to oppose the legislation; he was also the Friends' principal lobbyist in Washington, spending a total of four months there during 1980 while the legislation was pending. The money for all this came almost entirely from Big Sur residents. With unusual determination and persistence they raised nearly \$100,000 over a period of some six months, solely through barbecues and bake sales, \$100-a-plate dinners, the sale of T-shirts, and the solicitation of private contributions. The largest single contribution, says Josoff, was \$2,500, and that came in four installments.

The lobbying effort was a lesson in politics that all of Big Sur found instructive. Under the guidance of professional lobbyists from the National Inholders Association, an organization that represents the interests of private landowners within national parks and other federal preserves, Josoff and twenty-six other Big Sur residents who flew east to join him from time to time saw all but three

senators at least once and as many representatives as they could get to. They had educated themselves thoroughly and came armed with petitions, facts and figures, and, of course, the Big Sur mystique. Their first efforts were highly successful: the Cranston bill died in committee. It was the Panetta bill they ultimately had to fight. This was a much tamer piece of legislation, which dropped the idea of a full-blown National Scenic Area, played down the plan to acquire private landholdings, and assigned advisory powers to a nine-member area council, five of whom would have been Big Sur residents.

It was not Josoff's intensive lobbying, however, that finally defeated this legislation. The Panetta bill passed the House and in the waning days of the 1980 session of Congress was moving through the Senate toward final passage without too much difficulty, in spite of all Josoff could do. But Ansel Adams and the Wilderness Society had made a mistake. They had discounted the other senator from California, S. I. Hayakawa, just as they had discounted the Big Sur community. They hadn't even tried to enlist Hayakawa's support, out of distaste, apparently, more than anything else. ("Unfortunately," says Adams, "with Hayakawa we have a totally inept character.") The ironic thing is that Hayakawa wasn't initially all that hostile to either the Wilderness Society plan or the Panetta bill. But he didn't like being discounted. Later he even called Adams and told him, "I'm your other senator. Why didn't you talk to me, too?" The Adams forces didn't talk to him. Josoff and the Friends of the Big Sur Coast did.

They did more than talk. Hayakawa already had ties with Big Sur, having once lectured at Esalen. The Friends went to lengths to deepen those ties; they invited Hayakawa to Big Sur several times, took him on fact-finding tours, talked to him about the history and meaning of Big Sur, introduced him to some of the more interesting residents, fêted him at dinners, and enfolded him in the mystique. Hayakawa became the main opponent of the Panetta bill in the Senate. When Alan Cranston tried to get the bill passed as an amendment to other, noncontroversial legislation on December 12, 1980, the day Congress was to adjourn, Hayakawa was on the Senate floor. He moved that the entire amendment be read aloud, and forced Cranston to withdraw his motion. Privately he threatened to filibuster if Cranston persisted. Cranston did try one more time, Hayakawa objected again, and Cranston gave up. Cranston had plenty of support in the Senate for the bill, but not enough to survive a filibuster at Christmastime, or even the threat of one. At the eleventh hour, then, the individualists won. Big Sur would remain in private hands.

THE ATTITUDES OF RONALD REAGAN

It may be true that federal control of Big Sur would have done much more harm than good. Jim Josoff cites

figures indicating that after an area becomes a national park, national monument, or national what-have-you, tourist traffic increases as much as three times over what it was before. Neither the National Park Service nor the Forest Service, each underbudgeted and undermanned, has an especially good record for managing the land under its control. One of Ansel Adams's ideas was that staging areas be set up at both ends of the Coast Highway; all but local traffic would have been stopped there and tourists would have been bused into and out of Big Sur. This would have turned Big Sur into an outdoor version of those tableaux found in natural history museums—a huge, open-air diorama. The "quality of confusion," which is the quality of freedom, of happy possibilities, would have been lost.

But does it follow that if Big Sur has been saved from the Feds it has been saved? The fate of the area now lies in local hands—in the hands, that is, of the county officials in charge of the local coastal plan (LCP). This document is a product of the California Coastal Commission, the organization created by the voters of California in 1972 to control development along the coast. The commission's powers have until recently been exercised by regional commissions, and the commission with authority over Big Sur has been quite strict about limiting development. By law, however, the regional commissions are being dissolved in 1981, to be replaced by local commissions, which are developing their own local coastal plans. The recently adopted LCP for Big Sur was a subject of intense dispute while it was being drawn up, and it contains, some critics feel, more than one loophole. Perhaps its weakest point is a policy that no further development of any kind be allowed on any land visible from the Coast Highway. This takes about 5,200 acres out of development, and the courts will generally rule that such a "taking" is unconstitutional unless the landowners in question receive adequate compensation. But the county has very little money to compensate these landowners. The policy is thus bound to fall in the courts as soon as one of the landowners challenges it.

The owners of the Hill ranch, which covers some 7,000 acres of the loveliest land in Big Sur, are representative of those who would resist the LCP. The Hills raise cattle and are trying to figure out some way to pay inheritance taxes reported to be in the millions. One of their proposals is that they be allowed to build a 150-unit hotel on the ocean side of the Coast Highway, near the mouth of the Big Sur River. The Hills almost got this idea written into the LCP; it was dropped at the last moment. If they choose to go to court, they may still get their hotel. The Hills have been on the land for a long time; they clearly love it and know how to preserve it. They must know what effect a large hotel would have on Big Sur; but if they don't get it, they may have to sell pieces of their property to less scrupulous developers. Ansel Adams thinks the problem is insoluble. He says gloomily, "I

think that in the next ten years the local people will discover that they can't control the land. I think as soon as any big development comes in, they're going to be relatively helpless."

The biggest developer of all may prove to be the U.S. government. Ronald Reagan himself has gone on record as opposing any federal control of Big Sur. "The preservation of scenic natural areas," he has written, "should, in our federal system, be the primary responsibility of local and state governments." But of course the federal government, through the Forest Service, already controls two thirds of the area, and all offshore development rights. Whatever Reagan says, the federal government has the power right now to do a great deal of damage to Big Sur simply by opening up Los Padres National Forest to development or the Santa Cruz and Monterey Bay offshore oil tracts to leasing, as Secretary of the Interior James Watt proposed to do earlier this year. All of this could well happen. Assistant Secretary of Agriculture John B. Crowell, Jr., whose responsibilities include the Forest Service, is a former timber lobbyist and once worked for the Louisiana-Pacific Corporation, one of the country's major timber producers. His appointment was sufficiently controversial to inspire an unsuccessful attempt in the Senate to block it. Crowell claims to know very little about the area, and says, "I have no plans to do anything there right now." However, he indicates that should mineral discoveries be made, development would proceed as in any other national forest. There is a major mineral deposit, in fact, at the very edge of the Ventana Wilderness area just behind Big Sur—in a mountain known as Pico Blanco, which consists almost entirely of limestone, the finest limestone west of the Rocky Mountains. The Granite Rock Company owns part of the mountain and plans to mine it—from the east, where the work will not be visible from the Coast Highway. Should the mining go on long enough, Pico Blanco may become the first mountain in the world to resemble a Hollywood movie set, intact in the front, empty in the back. The enterprise would be perfectly legal under the Big Sur Local Coastal



Plan. Under such circumstances, Reagan's talk of local control seems rather hollow. The greatest danger in Big Sur, however, comes not from mining and logging but from thousands more people coming in and wanting housing developments, shopping malls, resort complexes. It's an eventuality, curiously enough, that Henry Miller foresaw and unexpectedly welcomed. Miller, in his expansive, generous way, thought paradise should be shared. "Walking the hills at dawn, or at dusk," he wrote, "looking over the deep canyons or seaward toward the far horizon, absorbed in reveries, drowned in the awesome beauty of it all, I sometimes think how wonderful will be the day when all these mountain sides are filled with habitations. . . . Yes, I can visualize multitudes living where now there are only

a few scattered families. There is room here for thousands upon thousands to come."

There's room all right, but if thousands upon thousands come it will certainly no longer be a paradise, as Miller in his soberer moments must have known. We need unsullied places. Somewhere in the mind's geography there must be a paradise, a place both beautiful and empty, where a man might dream of new beginnings. For the first European explorers, all America was such a place; indeed, Columbus, coming to the mouth of the Orinoco, thought he had discovered one of the four rivers of Paradise and that the very Garden itself was upriver, an angel still standing at the gates, to be found by someone sufficiently bold. Of course, men do not often successfully make new beginnings, and America, the new golden land, became something that Henry Miller could call "an air-conditioned nightmare." Its unimaginable original beauty survives only in places—and one of the most exalted of them is Big Sur. All the more reason to preserve it. In Big Sur, further development must be very carefully controlled, if not stopped entirely. We are not wise enough to live in paradise without destroying it. Here, by whatever means necessary—and at this point we can only pray that the residents will find their own flaming sword—the gates must be barred. □

YOUNG POETS



DAME ALYS

*"Wayte what thyng we may nat lightly have,
Thereafter wol we crie al day and crave."*

The Wife of Bath's Prologue,
Canterbury Tales, Chaucer

1.

The wife rises from her bath
and smells cabbage,
its aroma strong as last night's snapper
whose resilient bones
stick in the kitchen sink drain.
The bath water, blue and floral
swirls in the tub;
she lifts her feet, one and one,
and leaves clean, high tendoned prints
on the mat,
rushes, now, remembering
to turn the gas down
beneath the kettle.
If her neighbors looked across,
they'd see her, flat, intent and nude.
She shivers as she measures white sauce.
How much is enough?
No one but the wife is home.

2.

Alice ties her hair back;
everytime she does
her husband loves her thin arms
but wonders in what numbers others
came, adventuring with Alice.
And so he tells her
she might better spend her time
revising menus, doing sit-ups,
finding work which pays more:

"Go to law school, Alice,
don't you know I'm tired
of eggs and mushrooms Friday nights?"
Alice looks into the mirror
seeing no one whom she recognizes.
"Can't you look directly at me
when I speak to you?" he says.

3.

She pulls on dark red stockings.
Alice came from Cairo
with her morocco leather hand-tooled hassock
flattened in her trunk,
a gift she now gravely gives her husband.
"You may sit on it,
or kick it, as you choose."
He stands, perplexed.
"I won't let you have the children,
you aren't sane," he says;
"You haven't cooked a scrap of meat all week!"

4.

Alice let the long-cold water from the tub,
cleaned the kitchen drain
and took the garbage out.
She stands now in the doorway, dressed.
She holds up in her hand
an egg which had fallen to the floor
and didn't break.
"I loved the soufflé,
you are beautiful,
what is it that you want?" her husband says.
She touches his wet face.
Alice says, "It changes."

—Kathleen Atkins



VERMEER

The piety of small joys.
Lace. Bread and
Milk. Faces bowed to letters
Or gentlemen
With visions of the world.
A laughing girl.

No more than this
Ever. Or all day
By a window
A woman weighing pearls.
God's equation
Of peace and light.

—Mark Irwin



TREES THAT PASS US IN OUR CARS

They were not made
for such travel,
yet see in the wide field
how they stir,
how they shake themselves
free of the hill
and walk toward us,
opening their great branches
as they pass.
See how they lead
the white town out
to the road, carrying leaves.

—Wesley McNair



TARANTELLE

It jumped

out of the sun at my knee.
It grips me in jaws while

teaching the jig of St. Vitus.
I dance, stripped of my name.

Its embrace shakes up my blood,
making a sloe gin fizz.

I dance until bones
are maracas. Around me

sky flaps like a tent
and I glitter on feet

that are rivers. I hold
the sun in my teeth. The

tarantula is winding its silk.
I wash away with the rain.

—Janet MacFadyen



NIGHTS IN KÜSTENJA

“Winged time glides on insensibly . . .”

—Ovid

i want a salt water farm
with a view of mountains
hearty animals one good dog
lots of cats in the barn scruffy
children with hearts of gold
to help me grow old

in the second verse
i'll discover a pot full of
old money i'll share with my neighbors
we'll have a thanksgiving
to make the Pilgrim Club's look
like soda and a sandwich and Sanka
in foam cups

the end of the song
i'll have grandchildren in Boston
and there will be holes in
my sweaters where the apples
i keep for my horses have
worn through the rough wool
cut from my own fat sheep
knit by my wife

who will bury me quietly
on my hundredth birthday
then die of a broken heart
later that night

—Jim Merrow



PRODIGY

I have been practicing my scales all morning.
The music wanders around the house
into the room where my mother is ironing
into the kitchen
then out to the garden where the green tomato bugs
eat holes in the leaves
and back to my fingers
which are going five, six, seven. . . .

In another life
a woman would come for me
and take me out of the study and into the garden
and put me on her lap and say You may stay here
You may lie here and sleep or watch the circus clouds
and she would come for me anytime! anytime I wished.

I have been practicing my scales all morning.
If I do not improve the keys will bite me
and the thinnest wire wrap around my neck
and the music will roll its heavy tires
across my body.
My father owns this piano
but at night a huge shadow crouches in the corner
and I cannot sleep.

—Lynne McMahon

LIST OF FUNNY NAMES RELEASED

BY IAN FRAZIER



ILLUSTRATIONS BY VIVIENNE FLESHER

THE B. ROBERT BOBSON Memorial Foundation has announced the winners of its fellowship grant awards for 1981-1982. Chosen from a field of more than 4,000 applicants, the 305 winners will share \$8 million in award money in this the sixtieth year since the Bobson Foundation was set up "to provide financial assistance to promising artists, scholars, scientists, and shoppers."

A list of the winners in your area, along with their proposed projects:

Arthur Access, writer: a novelization.

Sean Allen, composer: a symphonization.

Patsy Angst, sculptor in residence, School of Artistic Supply: a kinetic sculpturization.

Carl Birdperson, associate professor of particle physics, Exact Change University: "If You Hit the Hope Diamond with a Sledgehammer, Would It Break?"

Bud Buh, writer: three film treatments, a TV pilot, and a couple concepts.

Seymour Butts, writer: a novel, "Under the Grandstand."

Marc Cohen, film-maker: being filmic.

Constance Crevecoeur, Martha Simpson Strong Professor of English Literature, Leading College: "The Novel *Finnegans Wake*: What th'-?!"

Kathy Diaghilev, choreographer: studying the dances of many lands and peoples.

John Diefenbacher, notewright: writing notes.

Perry Freud, sexologist: pure theoretical sexology.

Steve from Downstairs, artist: creating art.

Page Gauge, painter: apartments, stores, lofts, interior & exterior.

Walter Guff, professor of American-European history, Impressive

Transcript University: "World War II: Nothing but a Big Media Circus."

Tom Italianfood, poet: writing something that will be so much like poetry as to be virtually indistinguishable from it.

Raymond Jackson, male, 6'2", early twenties, wearing a blue windbreaker and white tennis cap: "Give Us Your Money or We Will Cut You With a Linoleum Knife" (in collaboration with William Wilson).

Ivan Kipling, professor of the humanities, Kevin's College: "Studies in the Comparative Intelligence of Several Experts in the Politics of the Caribbean Basin and My Cat, Tibbs."

Andrea Nope, poet: a sonnetization.

Laura Orals, professor of French and chicken farming, New People College: "A la Recherche du Frank Perdue."

Ranch Quentin, plagiarist: copying out William Faulkner's *The Bear* word for word.

Rick Ratatouille, parasculptor: hopefully getting a chance to meet and work with some real sculptors.

Johnny So-what, poet in residence, Springfield Elementary: saying "So what" and "Oh, huh" and "I bet."

Ted Tedshack, video artist: watching whatever's on.

Rowena Utter, pretend choreographer: pretend choreography.

William Wilson, male, 5'10", early twenties, wearing a tan jacket and a Pittsburgh Pirates baseball cap: "Give Us Your Money or We Will Cut You With a Linoleum Knife" (in collaboration with Raymond Jackson).

Bob Youbob, writer: behaving in a fictive manner. □

Ian Frazier's pieces have appeared frequently in The New Yorker.

MUSIC

THE TRUE BIOGRAPHY OF MARIA CALLAS

BY LLOYD SCHWARTZ



MARIA CALLAS HAS been dead for four years, but she remains a vivid presence—in fact, probably more vivid now than in the pale years between her final retirement and her death. A recent biography, *Maria Callas: The Woman Behind the Legend*, by Arianna Stassinopoulos, has been on the *Times* best-seller list for more than three months, and Callas performances—especially live performances on what used to be called “pirated” recordings, never approved by the artists for commercial release—have suddenly become generally available. Callas is an irresistible literary subject, and the aesthetic and psychological issues she raises suggest large, poetic themes (Yeats’s “perfection of the life or of the work,” for instance). For Ellen West, the anorexic title character of Frank Bidart’s powerful long poem in *The Book of the Body*, Callas represents the “unending struggle” between body and spirit:

—The gossip in Milan was that
Callas
had swallowed a tapeworm.

But of course she hadn’t.

The tapeworm

was her soul . . .

—How her soul, uncompromising,
insatiable,
must have loved eating
the flesh from her
bones. . . .

The second “body” her spirit assumes is the stage, opera, whose “mechanics, and suffocating customs, /seemed expressly designed to annihilate spirit . . .”

The spirit of Callas is with us, though, through her performances. “If anyone really wants to understand me,” she said, “he will find me entirely in my work.” Stassinopoulos doesn’t trust this

statement and looks everywhere but in the work to find the “real” Callas. “She lives on,” Stassinopoulos concludes, “like every great spirit, forever eluding our grasp.”

Stassinopoulos herself has an embarrassingly elusive grasp of Callas’s work. I don’t mean just silly references to the “Triumph Scene” in *Aida* or Dalila’s “Spring Song,” but the sloppiness throughout on musical matters. Could anyone familiar with opera possibly refer to Callas’s “hundreds” of opening nights? Or call the role of *Aida* “far too static”? Or say that *Fidelio* is about the victory of love over death? Stassinopoulos casually dismisses Spontini’s *La Vestale*, one of Callas’s more esoteric revivals and her first production with Visconti (his first opera production); she calls it a “poor man’s *Norma*” with a “pedestrian score and stilted plot,” then goes on to demonstrate her misconception of that plot. It seems a trivial error that Stassinopoulos misses by a year the date of Callas’s first collaboration with the great conductor Victor de Sabata. Anyone can make a mistake. But the fact that this misinformation is offered in a parenthetical flashback only indicates that Stassinopoulos has no idea of what it meant for Callas to be working so early in her career with a conductor on de Sabata’s level. She never mentions Callas’s first encounter with Giulini, either—at his operatic debut.

What Stassinopoulos values has little to do with singing or drama or the creation of art. Of Callas’s early appearances in Mexico City, Stassinopoulos writes: “All four performances were recorded, so we can actually experience the enthusiasm for ourselves instead of just imagining it through the reports.” Of Callas’s famous Berlin *Lucia*, conducted by Herbert von Karajan, we learn that “as the first night was broadcast, the enthusiasm, the ovations and even the stamping of feet are forever preserved on tape.” We discover that Callas couldn’t wait to finish her recording of *Carmen*, and that “torrential rain with thunder” meant a dozen retakes of the quintet, but nothing else about one of her last and most notable efforts.

IN CONTRAST TO HER lively narrative pace, Stassinopoulos’s descriptions of performances have a peculiarly hollow, enervated quality, no doubt the result

of their being secondhand. In the “source notes” to her sixth chapter, she says that she found John Ardoin’s “detailed and vivid” discussion of Callas’s Mexico City performances “especially useful.” She also acknowledges her “special debt of thanks” to Ardoin, “not only for his suggestions and corrections, but for all his generous help and guidance throughout the writing and rewriting.” (Ardoin, in a jacket blurb, calls this book “surely the finest biography of Callas ever written.”) Here is Ardoin in *The Callas Legacy*, his annotated discography, on the Mexico City *Aida*:

Callas soars upward an octave and sustains a full-voiced E-flat in alt virtually through the end of the orchestral postlude.

Here is Stassinopoulos:

Maria would soar upward an octave and sustain a full-voiced E flat in alt virtually all the way through the end of the orchestral finale.

It is clear that Stassinopoulos found *The Callas Legacy*, as well as the Ardoin/Gerald Fitzgerald *Callas* and Henry Wisneski’s *Maria Callas: The Art Behind the Legend*, “especially useful” about more than just Mexico City. Here is Ardoin’s comment on Callas’s Lady Macbeth:

Callas fills Lady Macbeth’s music with prodigious potency and atmosphere. Her voice creates scenery and action for the mind’s theater . . .

Here is Stassinopoulos’s:

. . . her voice created, all by itself, drama, scenery and action; and her huge, penetrating eyes added to the potency and atmosphere with which she filled the music.

Ardoin on the Callas Gilda:

It is a shame that Gilda did not remain an active part of Callas’s repertoire, for she could have forced the musical world to rethink the part as completely as she made it reconsider Lucia.

Stassinopoulos:

She could have made the musical world reappraise Gilda as she had made it look with new eyes on Lucia, Tosca, Norma, Armida. In-

stead she dropped *Rigoletto* from her active repertoire . . .

(In what way, I wonder, did the musical world "reappraise" Rossini's obscure heroine?)

Here is Fitzgerald on the opening of *Andrea Chenier*:

Callas let a climactic high-B get out of control, and it wobbled wildly.

Here is Stassinopoulos:

Maria let a climactic high B get out of control and wobble widely.

Ardoin on *Medea*:

. . . it was the first mounting of the opera in Cherubini's native land in nearly forty-five years. . . her *Medea* was a mixture of demi-woman and demi-goddess, with both halves at war within one body for supremacy. . . Norma contemplated the murder of her children and turned away from the deed. *Medea* not only took the lives of her infants but gloried in it. This primitivism makes *Norma* seem of cultured civility in comparison.

Stassinopoulos:

It was the first performance of Cherubini's opera in his native land for nearly forty-five years. . . her Florence *Medea* was not yet the magnetic demiwoman, demigoddess she saw in her mind's eye. . . Those who were expecting classical tradition and cultured civility came up instead against Maria's raw primitivism—the beast and the goddess in the same body at war with each other. *Norma* agonized over taking her children's lives but could not bring herself to do it. *Medea* not only did it but gloried in the murder.

Quotations from conductors, stage directors, set designers—Giulini, Bernstein, Zeffirelli, Benois—also are worked into Stassinopoulos's prose without specific acknowledgment. One particularly strange example turns up in her description of the notorious Rome *Norma* (where, even with the president of Italy in the audience, Cal-

Lloyd Schwartz is a poet who writes frequently on classical music.



las couldn't finish the performance). "She was in agony, her voice painfully strident and slipping away from her with every note she sang." Callas herself talked about her voice "slipping" that night. What a missed opportunity to quote the source itself.

The pervasive "dependency" and inaccuracy about music is symptomatic of a deeper flaw in the book—the treatment of Callas as an artist, her relation to her voice. Stassinopoulos never really deals with the voice as a voice. "It is not my voice which is sick, it is my nerves," she quotes Callas saying, and accepts the explanation. But there are many reasons a voice goes. Callas was not extraordinarily kind to hers, and her stamina was not always as great as her will. Surely, the psychological problems that Stassinopoulos, sometimes movingly, more often garishly, adumbrates are also caused by the failure of voice. Living up to The Callas Myth is a problem for Callas only when there is reason for her to doubt that she can. She finds more and more excuses not to sing, but this couldn't have been merely because she was upset with Onassis. The voice had always been riddled with unpredictability, and by the late 1950s the situation worsened significantly (think of the poignant story of her

Lucia in Dallas, in 1959, where, after missing a high E-flat on stage, she sang five E-flats in a row backstage). Stassinopoulos similarly credits the deepening of Callas's interpretations to her humanizing experience with Onassis—the Vestal Virgin becoming a Woman. But as Frank Bidart suggests in "Ellen West," perhaps the vocal difficulties themselves, the "struggle with the shreds of a voice,"

must make her artistry subtler,
more refined,
more capable of expressing humiliation,
rage, betrayal . . .

When Callas talks about having devoted her life to her art, Stassinopoulos calls it "denying her humanity." Like Onassis, Stassinopoulos is fundamentally unable to take Callas seriously as an artist.

STASSINOPOULOS HAS BEEN praised for her thorough research. She had access to tapes and letters no other biographer has seen. So we learn for the first time of Callas's secret abortion, of the details of her relationship with Onassis, of her affair with Giuseppe di Stefano. Yet there are countless omissions and mistakes. We hear about all the times Callas's health forced her to cancel appearances; but we aren't told of the time she performed *Il Pirata* the day after an operation, in considerable pain because of her allergy to narcotics. (Callas herself wrote about this episode in *Life* magazine.) She writes with relish of the "disaster" of Callas's last concert tour with di Stefano, and of one incident in particular. She suggests that they arrived in Boston several days before their concert, and says that "on the day itself, they had a fight, at the end of which di Stefano stormed out. . . Maria was furious: 'Imagine him leaving me alone . . . And in Kennedy country!'" But Mario De Maria, the manager of their American tour, says that he himself flew to Boston with Callas the very day of the concert, that di Stefano was ill and remained in New York with his wife. No one connected with the Boston concert had seen him arrive, and the Ritz confirms that Callas spent only one night there—the night of the concert. With a friend, the pianist Vasso Devetzi, filling in at the last minute, Callas gave her first live solo recital in almost a decade (in-

cluding, with appropriate irony, her first live performance of Manon Lescaut's "Sola, perduta, abbandonata"). She remembered Boston as the high point of her tour. Stassinopoulos tells her own version of this story with as much conviction as she tells everything else. Can we ever be really sure, then, for all the documentation in this operatic narrative, where biography ends and novel begins?

FINALLY, ALL OF this pales beside the fact of the records themselves. Callas recorded twenty-two complete operas (four of them twice). For years, tapes and bootleg records of her live performances—as many as twelve additional complete roles—could be located under the counter at through-the-roof prices. But within the past couple of years, Cetra and Turnabout have been issuing these records at standard or budget prices, and some of the smaller "private" labels (often offering better sound) have found national distributors. Even the big companies are moving in. Last year, Angel issued a complete *Traviata* from Lisbon with Alfredo Kraus, recorded a few months before the highly regarded 1958 London performance (itself available in superb sound on VOCE). No one had ever known that this production had been taped. Next year, CBS Masterworks, in conjunction with Cetra, is issuing an album of live Callas duets with the tenor Gianni Raimondi (opposite whom she appeared in *Traviata*, *Lucia*, *Anna Bolena*, and *Armida*). One can now acquire more Callas records, at more affordable prices and with less effort, than ever before. And none of them is without interest. (Not every record store stocks the smaller labels. Information can be had at German News Co., Inc., 218 E. 86th Street, NYC 10028.)

These recordings contain some of Callas's most famous and important performances: the Berlin *Lucia* (under Karajan); the Bernstein *Medea* (his opera debut); five of her six La Scala openings, including Verdi's *I Vespri Siciliani* (under Kleiber), *Macbeth* (under de Sabata), and *Ballo in Maschera*; and all five of the productions staged for her by Visconti—*La Vestale*, *Sonnambula* (under Bernstein), *Traviata* (under Giulini), *Anna Bolena*, and *Ifigenia in Tauride*. Excerpts by Callas are, of course, available from almost all of these operas—her studio recital albums

are among her most treasurable releases. But her ensemble singing and recitatives are as rewarding in their way, as illuminating, and as moving, as her big arias. Perhaps her greatest contribution to opera has been her unified, organic conception of an entire role. So that even though she recorded, for example, Lady Macbeth's three major arias (*Verdi Heroines*, 1958), which show us the changes in character that have taken place, it is not until we hear the complete performance that we can see how thoroughly Callas knows, and reveals, what brought those changes about. Lady Macbeth is one of her most fulfilled roles—one of the roles she wanted most to record in its entirety—and we are very lucky to have it. Donizetti's *Anna Bolena* would hardly exist today were it not for Callas's (and Visconti's) adventurousness. "Judges? For Anne?" Callas's dark-voiced rendering of Anne Boleyn's horror and outrage remains one of her most personal and masterly full-length portraits. The extended "mad scene" she later recorded in the studio is magnificent, but not enough.

Callas made recordings of only three Gluck arias—profound revelations of the deep feeling and power we usually miss in Gluck revivals. Now we can hear her in two complete Gluck operas (*Alceste* and *Ifigenia*). These, along with *Vestale* and *Medea*, show her grappling with a monumental style, quite different from the kind of lyrical intimacy she achieved in bel canto or the wealth of dramatic detail that suffuses her Verdi and verismo roles.

Callas's Violetta became perhaps her most unified and carefully worked-out stage characterization. But she never recorded any of Violetta's arias and rarely sang any in recital. She did record a complete *Traviata* in 1953, but was frustrated by the repeated failures to make one that would show how much she had learned since. Fortunately, there are now at least four live Callas *Traviatas*, on the highest possible level of achievement, each with its unique moments of special insight: the Lisbon (1958, Angel), in the best sound, with the wittiest, most naturally party-like first act; the Covent Garden (1958, VOCE), with Callas at her most fragile and interior; the Visconti/La Scala (1955, Cetra, 1956, HRE), the most intense, with Giulini's large-scale conception providing a heroic framework

for the "personal" tragedy. Especially in this role, Callas transcended the mechanics of melodrama by finding meaning in the mechanism. Violetta's too-easy, stagey submission to Germont becomes with Callas the very symbol of her fundamental despair. "*E vero, è vero*," "It's true," she whispers hopelessly when Germont warns her that Alfredo will surely get tired of her. Callas makes us feel this moment—every moment—as a key to the whole drama.

THOUGH CALLAS maintained remarkable consistency, no two performances are exactly alike. There were often differences in scale between the live and the studio versions (she said: "On records one has to reduce everything to a minimum"). Later performances usually brought about reconsiderations and deepening (many of the live recordings commemorate "firsts"), but also confirmations. The state of her voice, of course, might alter her emphasis. And with such hair-trigger timing and sense of rhythm, she could respond in a variety of ways to different surroundings—conductor, colleagues, sets and costumes, audience, even the director of the opera house. One can never exactly predict how a given performance will fall out. Lady Macbeth's "La luce langue" has a richer, darker atmosphere in de Sabata's more full-bodied live performance (Callas's first) than it had in the studio six years later; but the studio sleepwalking scene, with closer microphone placement (not always so flattering to Callas's voice) and Nicola Rescigno's tempo—more spacious, less "nervous," less "deranged" than de Sabata's—is more inward, wider in range, more harrowing in its transitions.

Callas is in stunningly beautiful, tremulous voice for her first *Sonnambula* (La Scala, 1955), shaping "Ah, non credea" into an endless pianissimo legato at Bernstein's all-but-motionless tempo (he kept going to extremes); the necessity for projection into a large opera house never compromises the illusion of intimacy she creates. On the 1957 studio recording, Antonino Votto's steady pulse allows a "speaking" quality for Amina's melancholy, enlivened by Callas's rhythmic elasticity and phenomenal sensitivity to dynamics. The aria is confided to us with such touching privacy that it's like listening to someone breathe or overhearing thought. The final aria, however, the

festive, bravura "Ah! non giunge," was probably never more satisfying than at that first live performance. It was Visconti's idea to turn up the houselights for the final verse. One can hear the lights going on in Callas's voice. She intentionally steps out of character to become the glittering prima donna whom the music is truly celebrating. Callas tries to stay more in character on the studio recording; but her voice is less easy and the results less interesting.

Callas's first Gilda, the eloquent center of a woolly Mexico City performance in 1952, is virtually the same betrayed but ennobled adolescent as on her 1955 studio *Rigoletto*—except that she later replaced her own flashy coda to "Caro nome" with Verdi's quietly dissolving trill. There are more dramatic changes in her *Aida*. In 1951, she drowned out the chorus with extended high E-flats and wallowed in verismatic sobs and tears. By 1955, in the studio, the voice is thinner and the sobbing has been assimilated into the more subtle texture of the phrasing. It's not until a spur-of-the-moment studio recording in 1964, however, that Callas finally makes all the complex dramatic shifts of "Ritorna vincitor" cohere under the pressure of her more insistent underlying rhythmic thrust.

Other roles change more drastically. Callas's debut as Rosina, in La Scala's 1956 *Barber of Seville* (under Giulini), only her second comic role, was fundamentally miscalculated—heavy of voice, playing to the balcony, the broad ad libs suggesting only forced spontaneity, the mock tragedy sounding more like bad Verdi than good Rossini. The production photos, oddly enough, look just right and were used a year later on the EMI-Angel album cover. In the studio (under Galliera), her Rosina became a triumph—refined, mercurial, scintillating, the voice infinitely lightened, needle- (not razor-) sharp, and full of tenderness, too. She never sang the complete role again. Two Medeas are almost diametrically opposed. Callas is in soaring, confident voice for the 1953 live Bernstein *Medea*. She's a witch, a monster, demonic in her bitterness, her venom barely contained and exploding at every unchecked moment. In far less voice in the recording studio in 1957, she portrays (under Serafin) a Medea who is desperate but vulnerable, brooding, "feminine." The strain in her voice



For a booklet on the history of our town and our hollow, just write us.

MR. TOODLER BRANCH is the one and only landmark in Lynchburg, Tennessee, that the government doesn't know about.

Our courthouse on the town square dates back to 1885. Our jail pre-dates that. And our distillery, where smooth-sippin' whiskey has been made since Jack Daniel settled here in 1866, is registered as America's oldest. Recently, the United States Government named all these places National Historic Sites. And if they ever saw Toodler, we bet they'd name him one too.



CHARCOAL
MELLOWED

DROP

BY DROP

Tennessee Whiskey • 90 Proof • Distilled and Bottled by Jack Daniel Distillery,
Lem Motlow, Prop. Inc., Route 1, Lynchburg (Pop. 361), Tennessee 37352

Placed in the National Register of Historic Places by the United States Government.

September report on

ATLANTIC MONTHLY PRESS BOOKS



THE SOUL OF A NEW MACHINE, by **TRACY KIDDER**, begins in a storm at sea, where aboard a small sailboat is a mysterious, energetic man named Tom West, who seems to thrive on lack of sleep. Another member of the crew wonders how four sleepless days and nights on a sailboat could be West's idea of a vacation. "Where," asks this person, "does West work?"

The answer, as readers of the July and August issues of *The Atlantic* will have guessed, is that West is the leader of a team of computer engineers at a phenomenally successful computer company, which has risen from nothing to the Fortune 500 in only ten years. West's contribution to that success is only part of the story contained in **THE SOUL OF A NEW MACHINE**, a book about which Robert Persig, the author of *Zen and the Art of Motorcycle Maintenance*, says:

"This is really a superb book, one that computer engineering has deserved for a long time. . . . All the incredible complexity and chaos and exploitation and loneliness and strange, half-mad beauty of this field are honestly and correctly drawn here. There is no exaggeration. I didn't think a book like this could be done."

THE SOUL OF A NEW MACHINE

by Tracy Kidder

\$13.95 at your bookstore

LITTLE, BROWN

becomes an expression of inner struggle. Bernstein, having seen the score for the first time only ten days before the performance, makes an auspicious but problematical opera debut, hastily making cuts that Callas, still relatively new to the role, evidently accepted but would later reinstate on the recording. The cuts simplify the character. The live version is thrilling in its energy and relentless violence, awesome, but not, like the studio recording, touching.

CALLAS REVEALS NEW shades of flexibility in her fascinating, indispensable series of Lucias, especially in the way she responds to the disjunction between words and music in the mad scene. Lucia acts out her imagined joy, her "wedding," while the accompaniment, a plaintive minor tune, reminds us of her tragedy. In the 1953 recording, with Serafin, Callas's voice remains veiled with sadness throughout—her sorrow is something she cannot escape, even in madness. In 1955, with Karajan in Berlin, Lucia is consistently more of an innocent. She seems genuinely happy in the mad scene—the voice is lighter, "wide-eyed." The complexity and tension emerge from the unqualified directness of each contrasting feeling: her love for Edgardo, her sudden terror when she sees the "fantasma," her complete reassurance, her joy in the wedding ceremony, her warmth of passion afterward ("At last I am yours; at last you are mine"). Karajan, too, underlines every transition and contrast. The voice is totally secure; though she doesn't attempt the first high E-flat, she saves it for an overwhelming climax to the whole scene. The great surprise, then, comes in the 1959 stereo remake under Serafin, with Callas in much less secure voice and with less secure support from Ferruccio Tagliavini, her Edgardo (di Stefano is magnificent in both earlier performances). Serafin gives her a lot of room and Callas takes full advantage of it. The mad scene, the best thing on the recording, is the most shapely and the most mad of her three versions, with the clearest distinctions between hysteria and calm, yet also their most thorough intermingling. The cadenza is simplified, but doesn't lose eloquence; both E-flats are there, though both are precarious. This Lucia is not an opera singer but a manic-depressive. It's one of Callas's

History
Mystery
and in·fo
to go

at your library

American Library Association

most sincere and convincing performances (almost making the Berlin version seem calculated)—and like the late *Gioconda*, *Tosca*, and *Norma*, somehow deeper for all the vocal difficulty and the absence of a responding audience.

Then it's amazing to be able to turn back to the 1952 live *Armida* (from which she never recorded anything commercially), to 1951 and the frivolous Proch "Variations" (one of her two preserved nonoperatic selections), or back even further, to the 1949 *Nabucco* (her earliest extant complete role, in rather primitive sound), to hear that Callas—overflowing with confident, full-throated trills and runs spanning almost three octaves, throwing herself into roles that don't demand the later care and thoughtfulness, or pain; to hear that thrilling voice at the beginning of its extraordinary yet somehow not surprising career. That's the biography, the *autobiography*, that should be required reading. □

THEATER ROYALLY NICKED

BY JAMES WOLCOTT



THE ROYAL SHAKESPEARE Company's production of Charles Dickens's *The Life and Adventures of Nicholas Nickleby* is a bold but benign show of force, a cannon-burst which serves notice on the world that though the English may no longer rule the seas or command the allegiance of colonies far-flung, on stage they brook no rivals. With more than 130 characters tramping across the boards, this neo-Victorian promenade not only gives Dickens's novel its full due—gives full expression to the tender airs and vile spites of its characters, to the sweep of its spacious narrative—but serves as a self-celebration of the range and bezazz of the Royal Shakespeare Company. A sellout for two seasons in London, *Nicholas Nickleby* will disembark at New York's Plymouth Theater next month for a fourteen-week engagement. Since so many recent Broadway offerings have been on the dinky side (*Wally's Cafe* had

James Wolcott writes for the Village Voice and for Esquire.

three characters, *It Had to Be You* made do with two), the streaming buzz of traffic on the Plymouth stage should strike many theatergoers as an eye-filling novelty. In the center of the turbulence is Roger Rees's Nicholas, flinging a fist into the faces of the cruel and unfeeling, his coattails flying in the wind.

Dickens's hero is no stranger to the footlights. Even before Dickens had completed the novel (it was printed in installments, the first number selling a whopping 50,000 copies), a pirate adaptation by the hack dramatist W. T. Moncrieff was produced at the Strand Theatre, in May of 1839. Three years later, during his tour of the colonies, Dickens himself saw an adaptation of *Nickleby* produced in Boston by a comic named Joe Field. (There is also a film version, directed by Alberto Cavalcanti, which appeared in 1947.) The RSC production, written by David Edgar and directed by Trevor Nunn and John Caird, is a bustling panorama, with actors declaiming directly to the audience, mini-stages rolling on and off, duels, card games, flirtations, weddings, floggings, orphan rebellions, bursts of song, snatches of opera, rippling seas of ruffles and lace. When you tell people that *Nicholas Nickleby* is a two-parter that runs eight and a half hours, they tend to roll their eyes heavenward and mutter, "Wagner . . ." But despite its Wagnerian length, there's nothing swollen or sapping about it—it moves with the speed of a dream, leaving audiences staggered with pleasure, pink-cheeked, refreshed.

It's the actors who get the workout. Not only do most of the cast play multiple roles, springing in and out of nearly 350 costumes, but as an ensemble they're employed abstractly to form walls, palisades, culs-de-sac. Flashy as the staging is, the action is brisk and clean. The great triumph of *Nicholas Nickleby* is that it embraces Dickens's sentimental excesses—the sobbing pathos, the melodrama, the back-slapping bonhomie—without dealing them the death-kiss of camp. For all its firepower and fine plumage, this *Nickleby* is keenly self-aware and yet untainted with smugness or condescension. It brushes away many of the awkwardnesses of the novel, bringing into sharper focus characters who originally were amiable or disagreeable blurs.

One of the happiest renovations has been made on the character of Nicholas

L.L.Bean®

Outdoor Sporting Specialties



**FREE
Fall
Catalog**

Fully illustrated. Features quality apparel and footwear for men, women and children; camping, hunting, hiking and winter sports equipment. For 69 years L. L. Bean has offered practical and functional merchandise at reasonable prices. Our clothing and footwear is rugged enough to withstand active outdoor use, yet attractively styled and comfortable for casual wear. Many items are of our own manufacture. All are guaranteed to be 100% satisfactory.

SEND FREE CATALOG

Name _____
Address _____
City _____
State _____ Zip _____

L. L. Bean, Inc.
151 Casco St., Freeport, ME 04033

SUBSCRIPTION SERVICE

Please include an Atlantic label to insure prompt service when you write us about your subscription.

Mail to: Atlantic Subscription Processing Center, Box 2547, Boulder, Colorado 80322

**ATTACH
MAGAZINE ADDRESS
LABEL HERE**

Change of Address:

If you are moving please let us know eight weeks before changing your address. Attach label above and include new address below. If you have a question about your subscription attach this form to your letter.

Name _____ (please print)

Address _____

City _____ State _____ Zip Code _____

To Subscribe: Mail this form with your payment and check:

☐ New Subscription ☐ Renewal

Subscription Rates:

1 year, \$18.00; 2 years, \$33.00; 3 years, \$45.00 (U.S. and Canada only; all other countries 1 year, \$20.00; 2 years, \$37.00; 3 years, \$51.00.) Mail to: The Atlantic, Box 2546, Boulder, Colorado 80322

himself. In the novel, Nicholas, a penniless young gentleman who teaches at a ratty Yorkshire school for bastard orphans and other discards, is a naive bit of unformed fluff. As played by Roger Rees, however, Nicholas is an arrow of noble purpose wobbling through the air's treacherous currents. Rees brings a gee-whiz enthusiasm to Nicholas's desire to rescue the meek and fragile; he always looks vaguely agitated, swaying on his heels as if he had just bolted over the hill and come to a skidding halt. Yet Rees's Nicholas isn't an excitable dunce; he has wit and resolve that flash forth whenever circumstances have him cornered. The scene in which Nicholas thrashes the brutish schoolmaster of the Yorkshire rathole—the infamous Wackford Squeers (Alun Armstrong, in the production I saw)—is thrilling, not only because a cruel dog is getting his comeuppance but because we can see a conscience angrily awakening to life. It's this boyish panache that also serves Rees superbly in his comic scenes, as when he prances about in tights as Romeo or ringingly tells off a mustachioed cad. In his scenes with women, Rees's Nicholas has an ardent music-hall sweetness. Slip a straw hat into his hand and he'd serenade the moon.

As Nicholas's sister, the shy and virtuous Kate, Emily Richard, too, sends off sparks of sly amusement. Richard, whom some American viewers may remember from TV's *The Glittering Prizes*, is graced not only with spaniel-brown eyes but with a voice that's pretty, pebbly. Were her voice a touch nasal or squeaky, her character's chaste sweetness would seem insipid—she'd be as precious as a shepherdess surrounded by bleating lambs. Perhaps the trickiest feat of acting is performed by John Woodvine as Nicholas's uncle, Ralph Nickleby. A stern skinflint who strides the streets of London in Wellington boots, Ralph Nickleby isn't one of Dickens's more vibrant villains; he doesn't have the shamelessness of a Fagin or a Squeers. He's a bit plain in his tight morals and businesslike reserve—a bit too pinched. On stage, Ralph Nickleby is a far more imposing vessel of wrath and smothered affections. With his crown of silver-gray hair, Woodvine's Ralph has the profile of a severe Roman senator—he wouldn't hesitate to give a wounded gladiator the thumbs-down. Played off



the swooning platitudes of his nephew and niece, Ralph's sarcasm and common sense have a brusque comic thrust. It's fortunate that a forceful actor is occupying Ralph Nickleby's Wellingtons, for the second half of *Nicholas Nickleby* (the longer half—it lasts four and a half hours) dwells heavily on Ralph's quicksand descent into disgrace. As the earth sucks him under, Ralph's chiseled features soften and slide to form a mask of melting anguish. His face dissolving, he resembles one of Vincent Price's unfortunate dummies in *House of Wax*.

COMMENTATORS ON THE novel have noted how Dickens divides his characters into those who meanly playact in order to advance themselves in the world—Ralph Nickleby, for example, who whistles up the skirts of the rich, bullies the poor, and is “familiar and jocose” with his cronies—and those who playact for the simple delight of drinking in an audience's applause. The latter group is represented by the band of thespians Nicholas briefly joins. After Nicholas flees the Yorkshire school with a pathetic simpleton named Smike (David Threlfall), he crosses paths with a touring theatrical troupe run by Vincent Crummles (Christopher Benjamin)

and his regal wife (Lila Kaye, who has the frizzled daffiness of a Hermione Gingold). Sheltered in the warmth of this company, Nicholas stars in a version of *Romeo and Juliet* that turns into a hilarious shambles: props droop, scenery topples, drunken actors muffle their lines, corpses suddenly burst to life (“I live!” the dead announce, springing to their feet). In the scenes featuring Crummles's company, the RSC seems to be celebrating its lineage: from such a motley crew came we, these scenes announce; their vanity is ours. Part one of *Nicholas Nickleby* ends with a triumphant bang, as the company masses on stage to sing a patriotic anthem. Mrs. Crummles, her tremendous bosom draped in a Union Jack, sings in a wavering voice, “England, arise!—join in the chorus,” and the entire company booms out its celebration of England green and glorious, where prosperity and industry go forever hand in hand. The history of England is carried in the blood of its actors, says this finale: the bloom of pageantry shall never fade.

Nickleby's pageantry never fades, but it does dip here and there. The second part is a bit too plotty, as is the novel. And, as in the novel, it's a vague let-down when Kate is married off to a carrot-topped silly named Frank Cheeryble—she deserves someone far more princely. (All of the Cheerybles are enough like licorice to bring on a toothache. Dickens based his philanthropic Cheeryble brothers on the merchants William and Daniel Grant, but neither in print nor on stage do they come rudely to life.) I also worry that at a top price of \$50 a ticket—\$100 for both parts—audiences will be so keyed up for a spectacular that even a chorus of angels descending from the rafters wouldn't satisfy them. And yet the corny brilliance of the production so carries one along that no hurdle should prove too high.

Indeed, the play ends with a sunburst of brash corny brilliance. After taking life's knocks on the chin, Nicholas finally completes his wanderings and achieves a restful angle of repose. Married and well-off, he's installed in the sort of homey quiet Dickens considered heaven on earth. “Everything is safe, soft, peaceful and, above all, domestic,” George Orwell wrote of Dickens's vision of earthly bliss. “In the moss-grown churchyard down the road are the graves of the loved ones who passed

away before the happy ending happened. The servants are comic and feudal, the children prattle round your feet, the old friends sit at your fireside, talking of past days, there is the endless succession of enormous meals, the cold punch and sherry negus, the feather beds and warming-pans, the Christmas parties with charades and blind man's buff; but nothing ever happens, except the yearly childbirth." The ending of *Nicholas Nickleby* conforms to this happy pattern, but the adapters then spring a twist that out-Dickenses Dickens. As idle happiness swirls about Nicholas, he sees downstage an enfeebled boy in rags, shivering: the ghost-image of poor dead Smike, whose grave is adorned with flowers left by a host of little Nicklebys and Cheerybles. Leaving the humming nest of his family, Nicholas walks to the foot of the stage and lifts the sickly lad into the spotlight as a chorus sings, "God rest ye merry, gentlemen . . ." The sheer brazen *daring* of this gesture cuts through all of one's sophisticated defenses—it drives home Orwell's great insight that Dickens was a writer who was *generously angry*. The novel left Smike safely buried; the play resurrects him to show that our duty to the Smikes of this world is never done. Don't never forget.

Even more than the bravura stagecraft, it's this unashamed airing of moral concern that makes *Nickleby* so bracing. *Nicholas Nickleby* clothes moral actions in a suavish style; it makes charity and benevolence seem dashing—sexy. In our time, evil has so often been charged with a mysterious allure while goodness has been treated like a sick cousin, drab and pathetic. A few years ago, an academic critic of Chaucer repeated the modish cant about evil characters (Milton's Satan, Iago) being more compelling than good characters (Milton's God, Desdemona), clenching his argument with the remark, "Take someone to the zoo and he wants to see the snakes." To which the critic Marvin Mudrick replied, "But it doesn't occur to him that nothing in life or literature is more interesting and exciting than goodness: that Troilus, Criseyde, and Pandarus are all both good and wonderfully interesting; so too Elizabeth Bennet, Anne Elliot, Sophocles' Antigone, Pushkin's Tatjana, Trollope's Plantagenet Palliser, Lawrence's Tom Brangwen . . ." Mu-

drick's capper: "And when someone takes me to the zoo I want to see the swans."

Nicholas, Kate, Smike, the blustering Crummles—all are swans of goodness, serenely stretching their wings while ogres and misers skulk through the underbrush. From the underbrush stones fly, but the splashes are soon followed by watery murmurs, the soft rustle of feathers. *Nicholas Nickleby* is a gliding procession. □

BALLET MOVING PICTURES

BY HOLLY BRUBACH



.....
TABLEAU VIVANT, a stationary sort of dancing in which familiar people or celebrities enact famous works of art, was a popular society entertainment at the turn of this century. No one considered it ballet, though dancers sometimes took part: during the first New York season of Diaghilev's *Ballets Russes*, in 1916, Vaslav Nijinsky posed as a gondolier by Carpaccio, on a program to benefit flood victims in Venice. The audience that evening could have seen no more than a fraction of Nijinsky's greatness—no breathtaking jumps or beats, only the plasticity that made him so versatile a dancer, able to transform himself miraculously into a puppet, a golden slave, a faun, or the specter of a rose. But that plasticity undoubtedly played a larger part in great dancing then than we can now imagine.

If the advent of photography helped to send painting in a more abstract direction, movies and TV may well have driven dancing in a more musical direction, in choreography that approximates the rhythmic complexity and speed of its score. Audiences reared on *Life* magazine and Hollywood movies no longer look to ballet for pictures. But if they did, they would find them in dances by Paul Taylor and Merce Cunningham.

For Paul Taylor's New York season last spring, the gala opening-night attraction was the revival of his *From*

Sea to Shining Sea, a sequence of tired-out patriotic tableaux, with a cast headed by Mikhail Baryshnikov, Rudolf Nureyev, Gwen Verdon, Hermione Gingold, Betty Comden, and Adolph Green. It was sometimes hard to see the forest for the trees. We got Baryshnikov crossing the Delaware, Green landing at Plymouth Rock, and Verdon stitching up the Stars and Stripes.

But when, the following night, Taylor's dancers took over the roles parceled out to celebrities for the first performance, *From Sea to Shining Sea* became a different dance altogether. It's this version that audiences will be seeing as the Taylor company performs the work, without celebrities, on tour.

The gags, some of them side-splitting and all of them over before you know it, became its substance (whereas the substance the first night was the cast), and the marvel of it was that Taylor had managed to weave out of all these scenes a whole piece of dancing. What makes his "Living Pictures," as he calls them in the program, succeed on their own terms where more traditional *tableaux vivants* would surely fail is a point of view.

Something is amiss. The spikes on the Statue of Liberty's crown are bent, as if vandals have been here before us. When the figure of Liberty reappears in the name of God and country, it's with a man sprawled across her lap—as the *Pietà*. Mae West, Marlon Brando, and the Ku Klux Klan all pass through. The weary soldiers hoisting the flag at Iwo Jima are barely able to stand up themselves. Men in bathrobes and women in curler bonnets wander the stage, dejected; we watch them brush their teeth. In a scene straight out of *Route 66*, or *The Flintstones*, or both, Elie Chaib drives an imaginary convertible past a hitchhiker, screeches to a halt, backs up, picks her up, and drives off; the wheels are played by two curled-up dancers turning somersaults, backward when he shifts into reverse. The *Mayflower* runs aground on Plymouth Rock (the rock played by a dancer), and the Pilgrims, as they set foot on American soil, are greeted by an Indian of the Cigar Store tribe. "How," he says, and, according to the best classical ballet tradition, launches into a long, fast mime speech, which starts out something like "Fish gotta swim, birds gotta fly . . ." and in no time progresses to a

Holly Brubach has written about dance for Vogue, Ballet News, and Ballet Review.

curvaceous woman and a four-letter verb, in Italian.

Choreographed in 1965, *From Sea to Shining Sea* has all the earmarks of its time—antiwar sentiment, slouching posture, moral fatigue. The dance survives because it's wittier than it is sullen, and it's hard to imagine any other choreographer working today who could carry off such an assignment. Or who would want to—this picture pamphlet looks static compared with the dancing that audiences have come to expect. Why go to see a ballet if its choreography isn't anything we couldn't do? (Not surprisingly, it was *Arden Court*, a new dance-packed piece that looks as if it were made at 33⅓ and performed at 78 rpm, that brought

turne. But Taylor's choreography, when he isn't borrowing scenes from history books or paying tribute to Nijinsky with an Egyptian-style frieze of his own, is every bit as vivid as when he is, and as visually original as the work of most painters.

In Taylor's *Polaris*, the only set (by Alex Katz) is a huge eight-foot cube, an aluminum-tube frame at the center of the stage. The dance is performed twice through—the second time by a different cast, to different music, with different lighting, which makes the cube glow first silver against a dark blue field, then bright white, like the heat of a star, against blackness. The choreography never strays far, and the steps that take place inside the cube are magni-



down the house and walked off with the season.)

Many resourceful choreographers turn, at one time or another, to painting and sculpture for inspiration. But when the original source finds its way into the finished dance, it's generally as a paraphrase rather than a direct quotation, a position rather than a pose. Vaslav Nijinsky's *L'Après-midi d'un faune*, from Egyptian reliefs, is one, and the most obvious, example. Frederick Ashton's *Foyer de Danse*, after Degas, is another. Homages to Thomas Eakins (*Eakins' View*, by Rodney Griffin) and Alexander Calder (*Under the Sun*, by Margo Sappington) are in the Pennsylvania Ballet's repertory. In a TV documentary, *Martha Clarke Light & Dark*, Clarke shows us the photograph of Baron de Meyer that inspired her *Noc-*

fied by it. *Polaris* begins with one dancer standing at the cube's center, facing us, and four others, one at each corner, facing her. They shift and climb over one another inside as if they were shut in a stateroom; they spiral-turn around the corner poles. An overhead light shines in, like a hot spot in an interrogation chamber. The dancing, by reiteration, takes on a magical, ritualistic quality: this is the sequence of events defined by this cube, this space.

This set, Taylor says, came first, before the choreography: the cube was the premise for making the dance. The cart carrying the set also came before the horse in two other cases. "I was over at Alex's studio and we were looking out the window, into the buildings across the street," Taylor recalls. "People were doing things—you'd see them

and then miss their action as they went from room to room and window to window, and then they'd reappear. So that was the idea for *Private Domain*," in which we glimpse the dancing through three arches in a flat drop curtain at the front of the stage. And, again, "Alex called me one day and said, 'I've got an idea for a set—dogs all over the stage.' I said, 'Great. We'll do it.'"

In that dance, titled *Diggity*, we see eight people wending their way through an obstacle course of twenty-five cut-out dogs—standing, sitting, rolling over, playing dead. The dogs stay put; the people—jumping, skipping, hopping in *arabesque*—dwell in a stratosphere just above the dogs' heads. Midway through the piece, two men roll out a giant-size cabbage that falls flat to reveal Linda Kent behind it. She dances a solo that announces itself as seductive, with arms flung open, an arched upper back, syncopated hips—movements that read as wild abandon—but in the end is overwhelmed by its own wholesomeness. This bit has about it the earnest, straight-to-the-audience sales pitch more typical of the Miss America Pageant's talent competition than of a Paul Taylor dance; it's out of place not only in *Diggity* but in the entire repertory. But just as we begin to get bogged down in its incongruities, the solo ends, the giant disc is lifted behind the dancer, and we see, painted on the flip side, a sunflower. The only possible logic for this non-sequitur is purely visible.

It's not just occasional moments that strike us as odd in Taylor's work, it's whole dances. His instinct for the unexpected is infallible. None of the preconceptions we bring to other kinds of dancing—to classical ballet, for example—do us any good when we're watching his choreography: the equilibrium we find in symmetrical arrangement, the reassuring knowledge that the dancers will eventually return to certain time-honored formations (the soloist in the center, set off by the corps) are missing completely. So is our notion of who dancers are.

Not all ballet dancers look alike, of course, but their bodies are shaped by the classical technique along similar lines, as if according to the blueprint for some superior race. Onstage, they acquire a universal identity that enables one ballerina to represent all women. Unlike ballet dancers, who gen-

erally have long, well-stretched, diagonally formed thigh muscles, loose-jointed hips, feet with a strong high arch for good spring in a jump, and, in women, a secure position on point, Taylor's dancers have haunches. Their strength runs along the front, not the back, of the legs, and when they jump, they lift themselves by the power in their thighs. The women have bosoms, the men are beefy. Their flat-footed speed, which is pure locomotion, brings to mind the Road Runner. The bodies of these dancers haven't been stylized—or idealized, as ballet dancers' have—by any uniform system of training; they seem instead to have been chosen for their singularity, in all shapes and sizes.

The governing principle in classical ballet is, traditionally, beauty. Every individual dancer aspires to certain standard positions. Turnout, in addition to facilitating a greater range of motion, shows us the most interesting lines of the legs. But this flattery, presenting the body at its best, is no concern of Taylor's. His dances, as a result, look determinedly honest, and innocent. We see fewer lines, more shapes. Classical ballet has a visual tradition all its own, and a dancer trained in it looks as if he had stepped out of a ballet. But Taylor's dancers look like people, and the images he makes with them have more in common with painting and sculpture than with other kinds of dance.

In *Tablet* (1960), *Le Sacre du Printemps* (*The Rehearsal*) (1980), and *Profiles* (a thumbnail sketch for *Sacre*, in 1979), Taylor explores his fascination with flat, two-dimensional dancing. His *Sacre* pays tribute to Nijinsky, who choreographed the same Stravinsky score the first time around, with positions in the style of *L'Après-midi d'un faune*—knees bent, with the legs and feet in profile and the torso twisted front, palms out and fingers curled under at the knuckle. Two women at a dressing table mirror each other's movements; we watch the final, sacrificial solo in a rehearsal-studio mirror upstage. John Rawlings's costumes and set, all black, white, and gray, except for an occasional red prop—a bag, a dagger, a baby's bunting—give this *Sacre* the look of a cartoon filmstrip. The somewhat hazy plot is a detective yarn, set in Chinatown. The Egyptian reliefs that inspired these same positions in Nijinsky are twice removed

and buried beneath other references.

The picture Taylor presents in *Nightshade* is drawn in indelible ink. The idea, according to Taylor, came from etchings by Max Ernst. Like a nightmare in slow motion, the dance unfolds with an inevitability that's at the same time terrifying and fascinating; it's hard to imagine a more horrific ballet. The horror lies in its ambiguity, and just after its premiere in 1979, reviewers made a desperate—but unconvincing—attempt to account for its action, as if by doing so they could reason away the dread that takes hold of us in witnessing it. But whatever *Nightshade* is about, its subject isn't nearly as clear as its images.

There are six people in Victorian

as the image persists and the laughter subsides, we find ourselves reluctantly considering the suggestion of rape. But suggestion is as explicit as *Nightshade* ever gets, and the dancing moves on without ever resolving the issue or the image.

By lanternlight, we watch two men crouched over a woman lying on the floor; another woman, as if testing for death, lifts her wrist and it falls back to the floor, lifeless. The gesture is repeated—another thud. The sprite sits perched on the black man's shoulders and, for a moment, for no good reason, we take heart. He whirls like a dervish. Then, without warning, she drops from where she sits and, her ankles around his neck, hangs limp, swaying upside



dress—the women in long skirts and bonnets, the men in tailcoats—and two characters who are distinctly not human: one, a quick-moving sprite (Carolyn Adams), whose ankle bands and short “grass” skirt made of colored ribbons are vague reminders of a medieval jester's costume; the other, a hulking man (Elie Chaib), dressed all in black, with a black face and a black moplike wig—a witch doctor or a mysterious voodoo god. In the course of the ballet, he struggles with a fair-skinned, red-haired woman (Karla Wolfangle), dressed in a loose black negligee—and prevails. The apparition of this woman dragged by the feet, seemingly nude, with her nightgown hanging down around her shoulders and her head in a big wicker basket, invariably provokes uneasy laughter from an audience until,

down. In this awful final image, whatever it signifies, we immediately recognize the vindication for our fears.

The score for *Nightshade* is a selection of Scriabin piano pieces, appropriately fitful. In *From Sea to Shining Sea*, John Herbert McDowell's music, which is sparse and aimless, confirms the restlessness that moves the dancers from one tableau to the next. And for *Diggity*, Donald York's pleasant but inconsequential score hums along like scenery seen through a bus window. While Taylor's ear isn't as sophisticated as his eye, he never fails to grasp the sense of the music and often uses it to create brilliant effects: when the Crook's stooge pulls a rhinestone necklace out of the bag on a piano trill in *Sacre*, we hear the tinkle of the jewelry.

Taylor's dances go along with their music, but don't comment on it, as George Balanchine's do. And though Balanchine, for his part, has designed some arresting images—a man on a journey, guided from behind by a woman, blindfolded by her hand (in *Serenade*), a sleepwalker on point, carrying a candle—even those images serve to call our attention to the music.

IF MERCE CUNNINGHAM'S choreography isn't quite so painterly as Taylor's, the reason is that he has abdicated responsibility for arranging the entire stage. The notion of fixed perspective, however convenient, isn't very realistic, Cunningham finds. "Ballet choreography is built for the king, who sits in the middle," he says. "That's not wrong, it's just a different way of thinking." So, thinking to provide people on the sides of the theater with as much of the dance as the king sees, Cunningham choreographs movement to be seen from any angle. If the set happens to obscure some of the dancing, as Frank Stella's free-standing stripes of color do in *Scramble*, as Jasper Johns's constructions from Duchamp's "Large Glass" do in *Walkaround Time*, that's fine; after all, he explains, "the movement may be obscured for one person, but not for another." The decor, which in the past thirty years Cunningham has commissioned from Robert Rauschenberg, Jasper Johns, Andy Warhol, and Mark Lancaster, is separate from but equal to the dancing. But in performance it often conspires with the choreography to make Cunningham's dances as visual an experience as any painting.

In *Fractions* (1978), eight panels of color hanging overhead impose a "ceiling" on the dancing. They slide up and down, forming a small-scale proscenium to frame the duets, providing a backdrop for a solo. The eight dancers, each wearing a different color—none of the shades the same as the panels—come and go, and eventually each puts on a second leotard or pair of tights in still another color. The dance, which is by no means simple, is further complicated by this color strategy.

Cunningham's interest in visual art has recently turned to video and film: he now makes dances to be seen two-dimensionally, on a screen, and afterward adapts them to the theater. But *Channels/Inserts*, choreographed for

film but worked out in the studio on video monitors, and seen onstage for the first time last March, seems a digression of a more important sort. For some time now, Cunningham's choreography has looked as if it were conceived in the mind's eye, to be approximated as nearly as possible by real dancers. *Torse*, *Locale*, *Exchange*—all recent works, heavy with ensemble choreography—share in the textbook exposition of Cunningham's technique. Like classroom combinations, they are movement at its most abstract, theoretical—without subject or plot, but also without reference to the dancers. In *Channels/Inserts*, however, the dancing and the dancers are one and the same. The choreography camouflages any technical weaknesses and displays each dancer's particular gifts—Chris Komar's eccentric *port de bras*, hinged at the elbow; Karole Armitage's savage attack, giving way to relaxed surrender; Lise Friedman's gorgeous line in supported *adagio*. Six men enter one at a time and, in turn, perform short solo variations on the same spot. Each of these solos is as big as the full TV screen in the video version, and it seems as if Cunningham has been forced by the camera's more intimate range to pay closer attention to his dancers.

The music, of course, is as independent of the choreography as the decor. But somehow the music and the movement never merge in Cunningham's dances, as the movement and the decor invariably do. During his company's last season in New York, some members of the audience came wearing cassette tape players and earphones, and as I listened to the shrill whistles, squealing feedback, and BB-gunfire of David Tudor's score for *Exchange*, I wondered what the dancing would look like if set to a Mozart score instead. Cunningham, who makes his dances in silence, can hardly argue that this new BYO-music policy, instigated by the audience, violates his work. Imagine a theater full of people who have decided to override his choice of composer and tune into their own: each would leave with a different impression of the same dance. But, whatever the score, *Fractions* will always be *Fractions*, *Channels/Inserts* will look like no other dance in the repertory, *Scramble* will be what it has always been. The identity of every Cunningham work declares itself visually. The dancing demands only to be seen. □

SHORT REVIEWS



.....✿
THE TEMPTATION OF EILEEN HUGHES
by Brian Moore. Farrar, Straus & Giroux, \$11.95. Eileen is twenty years old, shy, dutiful, and kindhearted. Since she has never in her life been outside Northern Ireland, an invitation to visit London as guest of her employers, Mr. and Mrs. McAuley, seems a great piece of luck. The trip becomes a maze of perverse psychological manifestations through which Eileen, who, although socially inexperienced, is neither stupid nor unobservant, picks her way with common sense and some help from a random knight in tarnished armor. Mr. Moore has succeeded in the difficult task of making an uncomplicated girl an interesting heroine, but one is left with the suspicion that he has also told the easier of two possible tales.

BYRON'S LETTERS AND JOURNALS Vol. 11
edited by Leslie A. Marchand. Harvard, \$15.00. "For Freedom's Battle" covers the last months of Byron's life, which he spent in Greece trying to bring some practical order to a chaotic war of independence. His final letters are naturally, in such circumstances, concerned with money, supplies, and military plans, but these sober preoccupations do not make them dull. A gaggle of "adventurers of all nations" had settled on Greece like buzzards on a corpse, and Byron, between calming duellists and controlling drunks, reported, "we are likely to form as goodly an allied army—as ever quarreled beneath the same banner.—" There were earthquakes that sent people diving through windows and negotiations with a crew of English armament mechanics who took one horrified look at the confusion and clamored to go home. Byron was plagued by braggarts, beggars, and liars ("there never was such an incapacity for veracity shown since Eve lived in Paradise," was how he put it), but he was also enjoying his part in an action that he believed was right. The volume ends not with Byron's death but with a return to his youth through letters to his close friend, Scrope Davies, a gambler and dandy whose papers came to

light in 1976, too late to take their correct chronological place in Mr. Marchand's work. Witty, teasing, irreverent, the letters to Davies make a spirited coda. Byron would have preferred to end with a bang.

MOVING PICTURES by Budd Schulberg. *Stein and Day*, \$16.95. When Mr. Schulberg announces, "I am my own team of archeologists," the reader expects a lively, intelligent memoir of youth in Hollywood, and that is precisely what the book provides. As the son of a powerful studio official, young Schulberg could watch the whole cinematic circus, and did so with small enthusiasm. He grew up, in fact, in a curiously compartmented world. At home, all was culture and high thinking. The studio ran on chicanery and the casting couch. "We lived among orange groves that were really poison trees," he observes, but what Mr. Schulberg did not enjoy at the time his readers now can and will.

MR. AMERICAN by George MacDonald Fraser. *Simon and Schuster*, \$16.95. For several years, Mr. Fraser has been reporting the adventures of Flashman, whose amusingly outrageous doings amount to a satire on military heroics and the glories of empire. His latest novel is rather different. Although Flashman is still about, the hero is an American mining millionaire who wanders into the highest society of Edwardian London and flourishes simply by refusing to alter certain frontier methods which are less simple than his new friends assume them to be. From brawl to royal bridge table, the story romps along, full of action and deftly managed period detail. It is thoroughly entertaining. It also suggests that Mr. Fraser may be hiding an intention of some seriousness behind his comic mask, for a chronicle of continuous folly in high places is basically serious no matter how funny in the telling.

THE TIGRIS EXPEDITION by Thor Heyerdahl. *Doubleday*, \$17.95. Mr. Heyerdahl's intention on his latest journey was to demonstrate that Sumerians, using a ship made of bundled reeds from the Mesopotamian marshes, could have sailed out of the Persian Gulf and on to India or Africa. After *Kon-Tiki* and *Ra*, one expects Mr. Heyerdahl to get where he means to go with his replicas of prehistoric craft.

V.S. Naipaul

Hailed by Irving Howe: "For sheer abundance of talent there can hardly be a writer alive who surpasses V.S. Naipaul. . . the world's writer, a master of language."—*The New York Times Book Review*

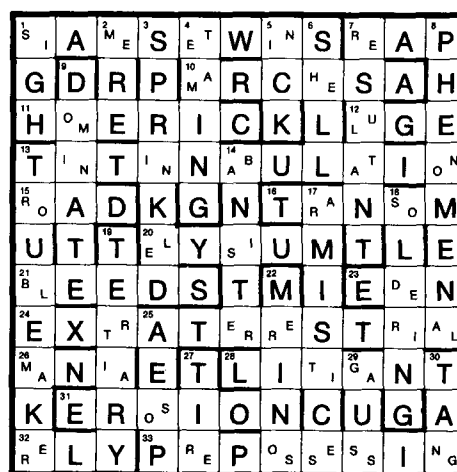
Explore the world of Naipaul in Penguin paperbacks:

<i>A House for Mr. Biswas</i>	\$4.95
<i>In a Free State</i>	\$2.95
<i>The Loss of El Dorado</i>	\$2.50
<i>Miguel Street</i>	\$2.95
<i>The Mimic Men</i>	\$2.50
<i>Mr. Stone and the Knight's Companion</i>	\$2.50
<i>The Mystic Masseur</i>	\$2.95
<i>The Suffrage of Elvira</i>	\$2.95



At your bookstore
PENGUIN BOOKS

Answers
to the
August
Puzzler,
"TWO IN ONE"



Across. 1. S(I)AME-SE T-WINS 7. REAP (hidden) 10. MARCHES-A 11. HOMER-I-C 12. LUG-E 13. TIN-T(INN)ABULATION 15. ROAD (homophone) 16. TRANSOM (anag.) 20. ELYSIU-M (anag. + m) 21. B-LEEDS 23. E-DEN 24. EX-T(RATER-REST)RIAL 26. MAN-IA 28. LI(TIGA)NT (*GI* at anag.) 31. EROS-I(O)N 32. REL(a)Y 33. PRE(POSSE)SSING
Down. 1. SIGH(t) 2. MERE (double def.) 3. SP(RINK-L)ED 4. TEA-MING 5. NICK (double def.) 6. SHE'LL 7. RE(SULTANT) 8. P(HE-NOMEN)AL 9. DO-M(IN)ATE 13. T(ROUBLE-M)AKER 14. BAN(IS)TER 14. A-(R)MIST-ICES 18. SOLD(i)ERING 19. T(ERTIA)RY (*irate* anag.) 22. MERINOS (anag.) 25. A-ESOP (*pose* rev.) 27. TIRE (double def.) 29. GA(US)S 30. TANG (rev.)

The New Communications and Freedom

JOHN WICKLEIN ELECTRONIC NIGHTMARE

"Anyone wanting to understand our electronic world should read John Wicklein's book—anyone wanting to preserve individual freedom in this brave new world **MUST** read it."

—BEN BAGDIKIAN

\$14.95

Who owns your body?

THE BODY AS PROPERTY RUSSELL SCOTT

A chilling exploration of the social, moral, and legal issues arising from our ever-increasing reliance on human organ and tissue transplants. "Informed and sophisticated."

—Kirkus Reviews

\$14.95

From alpha to x-ray,
a lexicon for the
science watcher.

COMING TO TERMS

by Wayne Biddle
Illustrations by David Suter

"Never again will I confuse a quasar with a quark. In the name of every ignoramus about scientific terms—and our number is legion—I thank you for this glossary, Mr. Biddle."

—WILLARD R. ESPY

\$8.95

THE VIKING PRESS



The principal interest of his Sumerian adventure is, therefore, not the sailing (although sailing through heavily traveled waters with a misbehaving wind was a very tricky affair) but the stops. *Tigris* put in at places where prehistoric traders would reasonably have done business, and where Mr. Heyerdahl saw archaeological evidence of such activities. He saw handsome ruins as well, and encountered engaging people. He also encountered, eventually, an international wrangle, which brought the expedition to a dead halt. *Tigris*, still in fine condition after gales, groundings, and collisions, had to be destroyed, but the ship had proved Mr. Heyerdahl's point. Mariners of 3000 B.C. could have made that voyage.

THE LUCK OF HUEMAC by Daniel Peters. *Random House*, \$16.95. Any novel about pre-conquest Mexico confronts two problems. The minor one is characters named Xiuhcozcatl or Ixtlilxochitl or Chalchiuhnenetl or worse, and troubles only hopeless Anglos. The major one is Cortez, waiting in the wings and bothering everybody. No amount of political intrigues or mass sacrifices (an Aztec habit which Mr. Peters does his best to avoid) can remove Cortez or counteract the knowledge that those actions which the author earnestly describes are ultimately futile. A hero who flies around in the shape of a hawk is no solution to the difficulty.

THE BOOK OF APHRODISIACS by Dr. Raymond Stark, N.D. *Stein and Day*, \$11.95. It is not exclusively aphrodisiacs that Dr. Stark discusses in this survey of folk medicines. He covers contraceptives, abortifacients, menstrual controllers—anything that people have used to cope with any aspect of sexual activity. Some of the substances are commonplace health-food items, others are wildly exotic. The properties attributed to both are likely to arouse amusement, amazement, and, occasionally, alarm. Who would have thought that watercress...? Ah, well, perhaps it is not true, for Dr. Stark never guarantees the efficacy of the concoctions he describes and he seldom gives any clear instructions for their use. The amateur herbalist who attempts self-medication on the basis of this text is as likely to hit the hospital as the bull's-eye.

—Phoebe-Lou Adams

"Compelling...simple and beautiful...."

This is cosmic drama that could have been invented by Tolkien."

—Washington Post

"Impressive science writing...."

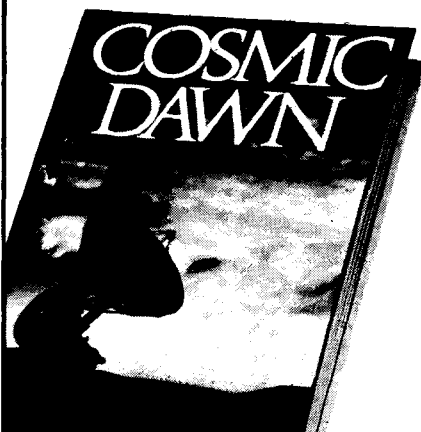
An attempt to set down in objective, nontechnical terms 'the broadest view of the biggest picture' modern science has been able to form of cosmic evolution since the Big Bang some 15 billion years ago."

—Publishers Weekly

"A clear and intelligent account,

fair and well balanced in its treatment of conflicting theories.... Chaisson's nontechnical handling of relativity theory... is particularly impressive."

—American Library Association Booklist



COSMIC DAWN

The Origins of Matter and Life
Eric Chaisson

Diagrams, line drawings \$14.95
at bookstores, or use coupon to order

Little, Brown Distribution Center
200 West Street, Waltham, Mass. 02154

Please send me _____ copies at \$14.95 each (135909-04963) of COSMIC DAWN.
☐ I enclose a check or money order payable to Little, Brown and Company in the amount of \$_____ (including \$1.00 for postage and handling. Calif., N.Y., Mass. residents include sales tax.)

Charge my ☐ American Express ☐ Visa
☐ MasterCard

Account Number _____

* _____ Expiration date _____

Signature _____

Name _____

Address _____

City _____

State _____ Zip _____

*Please enter 4-digit number to left of your name (MasterCard only). A-81

ATLANTIC CLASSIFIED

LITERARY INTERESTS

BOOK PRINTING—High quality work—low cost. Paperbacks or hard covers. 250 copies up. Write for free catalog and prices. Adams Press, Dept. AA, 30 W. Washington, Chicago, Illinois 60602.

EDITING, REVISING, TYPING manuscripts professionally. Marye Myers, P.O. Box 1019, So. Pasadena, Ca. 91030.

BOOK PUBLISHING—manuscripts and inquiries invited. Fiction, nonfiction and poetry. Free **AUTHORS' GUIDE TO PUBLICATION**. Write Dorrance & Company, Dept. M, 35 Cricket Terrace, Ardmore, PA 19003

For Free-Lance Writers

Honest instruction in writing for publication: **THE WRITER**, the monthly magazine with articles by leading authors and editors; plus up-to-the-minute lists telling where to sell manuscripts. \$14 a yr. For trial 5-month sub., mail \$5.50 to **THE WRITER**, 8-A Arlington St., Boston, MA 02116.

WRITING, EDITING, STATISTICS—Professional, confidential. Describe your assignment! **RESEARCH UNLIMITED**, Lockbox 300, Dayton, Washington 99328 (509) 382-2545.

Professional writing, editing, research. M&T Associates, Box 8366, Chicago, 60680. (312) 327-2582

THE MAN WHO ORCHESTRATED THE MUSIC OF THE SPHERES (\$10) George Richert, Box 719, Bridgehampton, NY 11932.

\$300+ for short fiction. **STORIES**, 245-C. Newbury, Boston, MA 02116.

BELLE'S LETTERS, a country journal: "funny, delightful." Subscription \$6. yr. Ma Belle, 1000 F Street, Petaluma, CA 94952

Trouble completing your manuscript? Problems with clarity, organization, writing technique? Blocked? We can help. Fair Copy Editorial Consultation. 420 28th St., San Francisco, CA 94131.

HOW TO MAKE MONEY WRITING & SELLING SIMPLE INFORMATION!

Make Your Writing Dreams Come True! This New Guide-Book Gives You Know-How and Tells You The Trick of Retaining Complete Control of Everything You Write. 176 Pages, 279 Illustrations! Take Your First Step with "Writing for Money Book" Satisfaction Guaranteed. Send \$15.00 (Add \$2 faster first class delivery: \$4.50 Foreign Air) To: Consultants Int'l. Box 6589-JA, Denver, CO 80206

BOOKS

FREE BOOK. Prophet Elijah Coming Before Christ. Megiddo Mission, Dept. 18, 481 Thurston Road, Rochester, N.Y. 14619.

PUBLISH YOUR BOOK! Join our successful authors. Publicity, advertising, beautiful books. All subjects invited. Send for fact-filled booklet and free manuscript report. Carlton Press, Dept. YKI, 84 Fifth Avenue New York 10011.

INSTANT MEMORY . . . NEW WAY TO REMEMBER. Forgetting No Memorization. Release your **PHOTOGRAPHIC** memory. Stop forgetting! Free information, Institute of Advanced Thinking, 845-AT Vialapaz, Pacific Palisades, California 90272.

GOOD USED BOOKS—WIDE VARIETY. intelligent selection. Libraries buy regularly; you can too! History, fiction, social sciences, literature, misc. subjects. Send dollar for listing of 20,000 titles and prices. Editions. Desk AM, Boiceville, N.Y. 12412.

BOOKS

BRITISH PAPERBACKS. Free catalogue from **BOOKS INTERNATIONAL**, Box 523, Southampton, Bermuda

PUBLISHERS' OVERSTOCKS, BARGAIN BOOKS. 2,000 titles, all subjects! Free catalog: Hamilton's, 98-65 Clapboard, Danbury, CT. 06810

"SEX AND SWEETHEARTS." Vernon Howard's powerful, new, wholesome booklet. Understand love! Solve problems! Command romance! End heartache! Only \$1. New Life, Box 684-A, Boulder City, Nevada 89005.

JAN'S WORK speaks to the few who suspect a disarming difference twix knowledge and knowing, quantum-psychology for those of peerless I-sight). Free catalog. Chan Shal Imi Press, P.O. Box 1365-J, Stone Mountain, GA 30086.

Self-improvement books. Free Catalog. RST Publications Box 403 Mt. Clemens, MI 48043

DOES EUCALYPTUS STUMP YOU? Find it quickly under *trees* classification in **SPELL IT FAST**, 25,000 words in 60 fun categories—music, authors, foods, psychology, etc. For family, teachers, executives, students. Great gift! 288 pg. 6" x 9", illustrated. \$7.50 post-paid. Dept. AM091 P.O. Box 14472, Chicago, Illinois 60614.

PUBLICATIONS

INSPIRATIONAL REVIEW. New concepts for a better life! Free information. Box 5610-AT, Los Angeles 90055.

Devoted to fiction? So is Rod Serling's **THE TWILIGHT ZONE** Magazine. America's only full-size monthly of short fiction. Wherever magazines or books are sold.

DISARMAMENT is the most important problem facing humanity today. The quality of life—in fact life itself—hangs in the balance. For a complimentary booklet *Disarmament in Attitude and Action*, write: World Goodwill Dept A, 866 U.N. Plaza, #566 New York, NY 10164.

WORLD PEACE. Send for the World Goodwill Newsletter, *Between War and Peace*, promoting the idea of peace through the use of goodwill and right human relations. World Goodwill, Dept A, 866 United Nations Plaza, New York, NY 10164.

J.R.R. Tolkien, C.S. Lewis, Myth and Fantasy are focus of the journal *Mythlore*: P.O. Box 4671-A, Whittier, Calif. 90607.

Parents Guide to Resources for the Gifted. Unique tools to turn on thinking: games, books, and practical information for developing the potential of bright youngsters. Send \$2 to Gifted, 3421 N. 44th St., Phoenix, AZ 85018.

OUT OF PRINT BOOKS

ANY OUT OF PRINT BOOK LOCATED. No obligation. Spinelli, 32 Elmwood, Pittsburgh, Pa. 15205

YESTERDAY'S BOOKS LOCATED, no obligation. **OUT-OF-STATE BOOK SERVICE**, Box 3253X, San Clemente, CA 92672

LOOKING FOR A BOOK? FREE BOOK SEARCH IF NOT IN OUR LARGE STOCK. WRITE GEORGIA B. HAXTON BOOKS P.O. BOX 503 PERRY, OKLA. 73077

BOOKPLATES

FREE color catalog offers scores of hard-to-find home library accessories. Antioch Bookplate Company, Box 28HH, Yellow Springs, Ohio 45387.

BOOKPLATES

FAMOUS ARTISTS' BOOKPLATES: Durer, Beardsley, Kent, 21 others. 50 assorted bookplates, \$4. Free catalogue. Bowman Printing, 743 Harvard, St. Louis MO 63130.

NEWSPAPERS, FOREIGN NEWSPAPERS

WORLDWIDE ENGLISH NEWSPAPERS. 65 countries including Thailand! Samples: 5/\$2.98. **FREE BROCHURE, MULTINEWSAPERS**, Box DE-A9, Dana Point, California 92629.

MUSIC

FREE Catalog! Harpsichords, harps, lutes, hammered or Appalachian dulcimers, banjos, mandolins. Completed or kits. HDC, 4419 West Colfax, AM, Denver, Colorado 80204.

ART

THE ARTS WORLD—interesting cultured single friends. Box 833, Amityville, N.Y. 11701.

Limited edition serigraph prints, numbered and signed by Chicago artist Gerald R. Perdue. 14" x 18". \$20 check or money order, to P.O. Box 60014 Chicago, Ill. 60660.

RECORDS & TAPES

RECORDS-TAPES! Discounts to 73%; all labels; no purchase obligations; newsletter; discount dividend certificates; 100% guarantees. Free details. Discount Music Club, 650 Main St. P.O. Box 2000 Dept. 37-0981, New Rochelle, New York 10801.

SERVICES

TYPING Manuscripts professionally. Prompt. G & G Typing Service, Box 425, Mendham, N.J. 07945

House sitting anytime. Retired teacher. Bonding and/or interview. Pets/children extra. 602-567-3550. Box 2085, Camp Verde, AZ 86322

THE WINE LAB, Dept. A, 1200 Oak Ave., St. Helena, CA, 94574. Equipment, classes, & analysis for home winemakers and bonded wineries. Yeasts & malolactic cultures. Send for free information.

Psychotherapy . . . Marriage Counseling by Ph.D. Licensed Psychologist, Diplomate Clinical Psychology, ABPP. (212) 988-1388; (201) 836-2748

DUPLICATING, FORWARDING. Efficient personalized lobbying. Reach every interest group in nearby D.C. Free Details. Kathryn Ainsley, Box 3150, Falls Church, VA 22043

MUSIC SET TO YOUR LYRICS. Reasonable. Albert Michaels' Gallery, 230 Fourth Avenue, Altoona, Pa. 16602.

PROFESSIONALS WITH PROBLEMS. Licensed clinical psychologist offers an in-depth, written, confidential consultation. \$25.00. Dr. K., 203 Brae Burn, Eugene, OR 97405.

GOURMET INTERESTS

FRESH COFFEE, TEA, SPICES. **FREE FOLDER, RAMAIYA CLOVE & COFFEE CO.** 2934 VICENTE SAN FRANCISCO, CA 94116

RECIPES

Liquid Smoke, many recipes explaining easy oven barbecuing. E. H. Wright, Box 899, Brentwood, TN 37027.

RECIPES

MASTERPIECE KITCHEN, 5 traditional English recipes \$3.00 LA, 9 Maple Avenue Plainsboro, N.J. 08536.

FRENCH BREAD—Crisp, warm and wonderful recipe! \$2.00 to Gardena, P.O. BOX 1553, Eugene, OR 97440

14 KARAT GOLD carrot cake and chocolate-cake recipes. Both truly delicious. \$2 SASE. 231 Martin Drive, Apts, CA 95003

MY OWN OLD COUNTRY HUNGARIAN RECIPES. \$5.00. N. MAGYAR, 1538 ACACIA DRIVE, AKRON, OH 44313

Kosher Pickle and Spaghetti Salad recipes. Both for \$2.00 and SASE. Kidd, 6452 Antionette, Maumee, Ohio, 43537

Zippy beef and vegetable combination. Hot and spicy. \$2.00. 769 West Bonita, Claremont, Calif. 91711.

EVERYBODY loves my CONGO BARS, chocolatey, nutty, yet indescribable. Recipe \$1, SASE. Margaret's Daughter, Box 1433, Concord, MA 01742

Authentic Italian Dinner Party, includes 6 original recipes. \$3.00 Pine Tree Press, P.O. Box 9906A, South Lake Tahoe, Calif. 95731.

PORTUGUESE CODFISH STEWS: Two quite different delights. Plus: A-Meat-In-Itself Spaghetti Sauce. \$2.00 SASE. DeJasu, 314 W. 103 St., N.Y., N.Y. 10025

777 NEW RECIPES FOR FRUITS AND VEGETABLES!

Vegetarian Cookery; Soups, Sweets, Ices, Cakes and Biscuits. How to Make for Yourself, in a Few Minutes, the Famous Janet Walker's Wholemeal Loaf. This Guide has brought Thousands a Wonderful New and Delightful Happiness. Send \$3 plus 50¢ postage for "Vegetarian Cookery" (Now Available! "Herbs for Health" Book also \$4 plus 50¢ postage) Order Either or Both from: Consultants Int'l. Box 6589-VA, Denver, CO 80206

DAZZLE YOUR DATE. Two dinner recipes, fantastic, easy. \$2.00. Gerald, 3931 Wilcoxson Dr., Fairfax, Va. 22031

DELICIOUS IRISH Scone, Irish Plum Cake, Gingerbread Recipes. \$2.00, SASE. M.Bryan 2031 Knorr St. Philadelphia, Pa 19149

SAUSAGE DESERT CAKE, #1, 3 Crescent; Silver City, N.M. 88061

HEAVENLY RASPBERRY PIE. "Out-of-this-world" frozen dessert. Light & easy. \$2.00 Susan's, 9090 S. Braeswood #4, Houston, TX 77074.

SUPER STEWS—Rave Reviews. Pork Chop Stew and Six Hour Beef Stew. Send SASE, \$2.00 to: Stews, P.O. Box 2441, Seattle, WA 98111.

CHEESECAKE recipe; world's best. \$2.00 SASE. P.O. Box 730, Poulsbo, WA 98370

SCHOOLS & COLLEGES

NONRESIDENTIAL UNIVERSITY DEGREES Bachelors, Masters, Doctorates, for the accomplished individual. State-authorized, inexpensive, efficient. *Richard L. Crews, M.D., President*

COLUMBIA PACIFIC UNIVERSITY
150 Shoreline, Suite 8009 • Mill Valley, CA 94941
Call Toll Free USA: 800-227-1617, ext. 480
California Only: 800-772-3545, ext. 480

PARENTS

PARENTS: Your child can improve school grades. Professionally developed, proven audi-cassette, and illustrated guide helps child directly to be organized, want to learn, work to potential. Grades 3-9. Send \$11.50. The Learning Corporation, 6118 La Jolla Boulevard, La Jolla, California, 92037.

ASSOCIATIONS

BERTRAND RUSSELL SOCIETY. Information: AM, RD 1, Box 409, Coopersburg, PA 18036

ASSOCIATIONS

An Opportunity for Graduate Women

The American Association of University Women offers you a unique opportunity to join other college women in your community to improve the status of all women. If you are a graduate of an accredited 4-year college or university, you are eligible! For more information call 800-424-9717 or write:

AAUW Membership Services
2401 Virginia Ave., NW, Washington, DC 20037

HEALTH

Vitamin C-B Complex—our specialty! Are you sure you are taking the right product and the correct dosage? For information, SASE to T.A.D. Corporation, Box 193, Fair Haven, N.J. 07701

EMPLOYMENT OPPORTUNITIES

ROCKY MOUNTAIN EMPLOYMENT NEWSLETTER!! Colorado, Idaho, Montana, Wyoming!! Current openings—all occupations!! Write for free details: Intermountain-2C, 3506 Birch, Cheyenne, WY 82001.

USE YOUR FOREIGN LANGUAGE to get a better job. Factual, comprehensive book. \$6.00. Columbia Language Services, Department 23, Box 28365, Washington, DC 20005

GET THAT RAISE! New report tells you how! Don't blow your chances, order today. \$10.00 ppd. Refund if dissatisfied. Pellerin Technical Services 6427 Hillcroft Drawer 1024AM Houston, TX 77081

OVERSEAS EMPLOYMENT

Men! Women! Jobs on Ships. American, Foreign. Worldwide travel. Guide \$3.00. Seafax, Dept. W-2, Box 2049, Port Angeles, Wash. 98362.

OVERSEAS—ALL OCCUPATIONS! Complete information plus Worldwide Directory—\$3.00. Opportunities, Box 19107-YW, Washington, DC 20036.

A-U-S-T-R-A-L-I-A . . . N-E-W-Z-E-A-L-A-N-D WANT YOU!!—JOBS!!—PAID TRANSPORTATION!!—NEW REPORT!!—\$2—MONEYBACK GUARANTEE!!—“AUSTRALIA COMMISSION,” 894-H9 NATIONAL PRESS BUILDING, WASHINGTON, D.C. 20045

OVERSEAS EMPLOYMENT . . . \$20,000—\$60,000+. All Occupations! Free Report! Employment International, Box 29217-YW, Indianapolis, Indiana 46229.

JOBS OVERSEAS . . . (including Alaska). Free Details. Global Employment, Box 808-V, National City, California 92050.

OVERSEAS JOBS—NOW HIRING! 66 Countries. Top pay. Free transportation. Tax benefits. Latest Computerized reports \$2.00. Jobworld, Box 681, Cypress, CA 90630.

AUSTRALIA—NEW ZEALAND! Big pay! Countless jobs! All occupations. Free transportation. Latest Employer listings \$2.00. Austco, Box 772, Cypress, CA 90630.

BUSINESS OPPORTUNITIES

STAY HOME! EARN MONEY addressing envelopes. New Genuine offer 15¢. Lindco, 3636-AM Peterson, Chicago, 60659

ERASE DEBTS with little-known law—CREATE wealth!! Details FREE! Blueprints (#HH9), Box 100, LaGrangeville, NY 12540

ENJOY MAKING BUMPERSTICKERS—Inexpensive kit—Easy, Profitable, Portable. Free Details. POB 22791 (AE), Tampa, FL 33622.

PROSPEROUS FREELANCE CONSULTING! Learn how to conduct/market professional personal development seminars/national scope. Contact: Barbara Schwartz, ASSOCIATES, 2425 South Steele, Denver, CO 80210, 303-756-9127 concerning next, nearest certification weekend.

BUSINESS OPPORTUNITIES

FREE! 5 monthly issues of Opportunity Magazine. Learn the secret to earning extra cash. Issues full of profitable success stories. **FREE.** Write Opportunity, Dept. 623, 6 N. Michigan, Chicago, 60602

MAILORDER OPPORTUNITY! Start profitable home business without experience or capital. Write for free book, case histories, plus details. No obligation. Mail Order Associates, Inc., Dept. 535, Montvale, NJ 07645.

IMPORT-EXPORT opportunity, profitable world-wide, mail order business from home, without capital. We ship plan for no risk examination. Experience unnecessary. Free Report. Mellinger, Dept. M1089, Woodland Hills, California 91367

REAL ESTATE

GOVERNMENT LANDS . . . from \$7.50 Acre! Homesites, farming, vacationing, investment! "Government Buyer's Guide" plus nationwide listings—\$2.00. Surplus Lands, Box 19107-YW, Washington, DC 20036.

IN SCOTLAND we can find you a beautiful home in gorgeous country at a reasonable price. Write: Millbank Company, Millbank Cottage, Ascog, Isle of Bute, Scotland.

\$27,500.00 buys furnished home ideal spot of U.S.A., Write: Wahl, 821 Bliss St., Lake Arthur, La. 70549

Alaska government land is available for private ownership . . . commercial, agricultural, residential, recreational, remote . . . purchase, lease . . . Details \$5, New Zone, Box 911-A, Auke Bay, Alaska 99821

RETIREMENT LIVING

UNIQUE VILLAGE—live independently, inexpensively. Ranch house—only \$115 monthly or \$9,500 Life Lease, plus improvement charges, modest monthly fees. Bristol Village, Waverly, Ohio 45690.

YOU'VE EARNED A SECURE FUTURE. LIVE IT AT WESTMINSTER-CANTERBURY IN VIRGINIA BEACH. It's for those over 65 who don't intend to retire from life. Opening in 1982 on the Chesapeake Bay, a comfortable lifestyle and lifetime medical care start with a minimum one-time founder's fee of \$38,720, plus reasonable monthly fee. For color brochure with full information, write: Westminster-Canterbury, 4700 Thoroughgood Square, Dept. T, Virginia Beach, VA 23455 (804) 460-4434.

VACATION RENTALS

WRITE A BOOK

Ideal hideaway house. Rural Jamaica. Modern facilities for two. \$400.00 fortnite, \$695.00 monthly. Hotel beach nearby. Box 18088, San Antonio, Texas 78218.

BEACH HOUSE: ELEUTHERA, BAHAMAS UNDERDEVELOPED ISLAND, TRANQUIL SETTING, beautiful ocean views, fully equipped, one bedroom, accommodates four. \$295-325, weekly. Contact Bailey Conaway, 14888 Triadelphia Road, Glenelg, Maryland, 21737, (301) 442-2676

ORLANDO/DISNEY WORLD—condo, sleeps 6, pool, tennis, \$350-\$500 Weekly (617) 965-6235.

Peaceful lake house near Frederisburg, Va. October to May. Write, research, sail, fish. (202) 362-3266

MILLOOK, CORNWALL, ENGLAND. FULLY FURNISHED COTTAGE IN MAGNIFICENT COASTAL SETTING. SUITABLE WRITER-SABBATICAL-NATURE LOVER. SIMONE MEHTA, POST OFFICE BOX 1872, SAN JUAN, PUERTO RICO 00903

TRAVEL

SOUTHWEST SAFARIS: Bushflying—Jeeping—Rafting—Hiking. Natural history expeditions explore remote southwestern frontiers. Geology/Archaeology/Botany. Brochure: P.O. Box 945, Dept-116, Santa Fe, NM 87501.

REALISTICALLY learn French, French cooking, and wines in comfortable French home in rural BURGUNDY. Small numbers, adults only. For information "Yeto", Paily 89140 Pont sur Yonne, France.

SLEEP CHEAP: 1400 tourist homes where two can stay for as little as \$10. nightly. Directory: \$5.45 postpaid. McBride/Publisher, 157-AM Sisson Hartford, CT 06105

Save 50% on cruises! Our members do. You can too! Details Free. TravLips Association, Box 188A2, Flushing, NY 11358

FILMS AND COLOR SLIDES

GAF COLORSLIDES Worldwide catalog \$1.00. Worldwide 7427-A Washburn Ave., So. Minneapolis, Minn. 55423

GOVERNMENT SURPLUS

J-E-E-P-S — \$58.00! — C-A-R-S — \$35.00! — 700,000 ITEMS! — GOVERNMENT SURPLUS — MOST COMPREHENSIVE DIRECTORY AVAILABLE TELLS HOW, WHERE TO BUY — YOUR AREA — \$3 — MONEYBACK GUARANTEE — "SURPLUS INFORMATION SERVICES", BOX 99249-GM9 SAN FRANCISCO, CALIFORNIA 94109.

SURVIVAL, CAMPING, GOVERNMENT SURPLUS, BOOKS, GUN ACCESSORIES WRITE FOR NEEDS, OR LIST OF ITEMS WE STOCK. DENNIS ANDERSON SURPLUS, DEPT TAM, P.O. BOX 38294, GERMANTOWN, TN 38138

SURPLUS JEEPS, CARS, and TRUCKS available. Many sell under \$200! Call 312-742-1143 Ext. 5847 for information on how to purchase.

GIFTS

Award yourself a certificate from the Herman Goering Flying Club. Beautifully printed and finished, personalized. \$4 postpaid. Smiling Cat Printery, 110 S. Jefferson, Loveland, Colo. 80537.

NOSTALGIA STATION, B&O RAILROAD MUSEUM Now offers new free catalog of authentic railroad memorabilia. Traditional dining car china, dinner chimes, trainmen's lamps, silverware, RR jackets, books, prints and 150 other unique gifts and original artifacts for collectors and railroad buffs. Mailed on request. 901 W. Pratt Street, Balto., MD 21223/Dept. A

Great gift idea for Dad the volunteer coach. Insure success. Tips galore. Send \$12. SPORT SCENE quarterly, 4985 Oak Garden Drive 102, Kernersville NC 27284.

UNUSUAL GIFTS

FANTASY PRODUCTS Buttons, stickers, note cards, rubber stamps, more. Dragons, unicorns, Tolkien items, etc. Free catalog. TK Graphics, Dept. A, Box 1951, Baltimore, Maryland 21203.

HANDWRITING ANALYSIS

HANDWRITING ANALYSIS—Revealing, send 25 word sample, \$5.00, Crystal Lee, 2422 Logue, N. Bellmore, N.Y. 11710.

MISCELLANY

COLLECTING MILITARY MEDALS? List 50¢. Vernon, Box 387A, Baldwin, N. Y. 11510

VERY LITERATE T-SHIRTS

Austen, Shakespeare, Dostoevsky, Wilde, Whitman, Huxley, V. Woolf, Hemingway, Dickinson, Voltaire, C. Bronte, Goethe, Hardy, Kipling, Homer, over 100 others. Sizes S, M, L, XL. T-shirt: (white, lt blue, or red) \$10. 4/\$36. Sweatshirt: (grey) \$16. 2/\$28. Shipping: 75 cents each. Foreign: remit \$US. Catalogue: 75 cents. Historical Products Box 220 YA Cambridge, MA 02238



MISCELLANY

HUMOROUS VERSE, make presentations, special gifts sparkle! Roasts, audience warmer uppers specifically for subject. Send data, \$1.00 per line desired. Twenty lines fill minute. Satisfaction or money back. Versifier, Box 9828, Brookpark, Ohio, 44142

PURE COMFORT
PURE COTTON DRAWSTRING PANTS, TOPS & ETC'S.
DURABLE COMFORT & AFFORDABLE PRICES
Free Catalogue and Swatches

DEVA A COTTAGE INDUSTRY
BOX AMX
BURNETTVILLE
MARYLAND 21718

VENI, VIDI, NON-VICI. Search for truth, serious and humorous, discussing: law, medicine, arts, etc. Send \$3.00 to: Adolph Sandole, 1619 Broadway, New York, New York 10019.

WIDE NECKTIES NARROWED to 2" or 3" width. Send 3 ties and \$12.50 to SLIM TIES COMPANY, Dept. I, 44 Monterey, S.F., CA. 94131.

COMPARE WAYS/costs moving to California—\$3.00. Cameo, BOX 1167-AM, Westfield, MA 01086

EINSTEIN CENTENNIAL POSTER—world famous Halsman portrait, produced in 1979 to honor the 100th anniversary of Einstein's birth. Limited quantity. Send \$10.00 to: Rinhart Galleries, Inc., Box 73, Colebrook, Ct. 06021.

GEOSOLAR GREENHOUSE BLUEPRINTS Superb engineering, simplified construction, standard materials. Catalog \$2. Lightspace, 321-N Lincoln, Bloomington, Ind. 47401

BRILLIANT PERSON, DUMB CAREER? Change careers for greater personal fulfillment and more money. Free information. Exponent, Box 862-T, Walnut, CA 91789

SURVIVE terrorism, shortages, riots, nuclear war. Condensed Guide based on our seminars. \$4.00 postpaid (\$5.50 overseas). Strategy Research Institute, Dept. 114, Box 1794, Grants Pass, Oregon 97526.

"RUSTIC CUT" BIRD FEEDERS Beautiful natural wood design—No Nails! Only \$9.50 Birdware 23645 Yellowstone Trail Excelsior, MN 55331

RARE COINS

BE ACQUISITIVE!

(and hide your money from inflation.)

Where can you hide your money from inflation? Try The Rare Coin Guild, a monthly rare coin acquisition plan, offered by New England Rare Coin Galleries, the world's largest rare coin dealer. The Rare Coin Guild is the best way for you to acquire fine rare coins . . . without being a numismatic expert. Change your money from inflatable paper into a hard asset with excellent potential as a hedge against inflation. And through the Guild you can acquire rare coins for as little as \$100/month. Write for our free brochure.

The Rare Coin Guild

A MONTHLY ACQUISITION PLAN

89 Devonshire Street, Boston, Massachusetts 02109
Toll-free 800-225-6794 ☐ In Mass. 617-227-8800

SELF-IMPROVEMENT

OVERWEIGHT? OUT OF CONTROL? Get off the diet Roller-coaster. **THE FATBOOK** by Dr. Howard Lamb, self-directed workbook and cassette. \$39.95 plus \$2.80 postage & handling. Credit cards accepted. Order, or write for free info to: **THE FATBOOK**, Box 796, Mill Valley, CA. 94941. Calif. residents add \$2.40 sales tax. Money back guarantee.



INSPIRE THINKING

with this authoritative source of information on the needs of bright children.

• Practical Suggestions for Parents

• Recommended games, books and gift ideas.

Enclosed find \$2.00. Please forward my copy of the **PARENT GUIDE TO RESOURCES FOR THE GIFTED** to:

Name _____

Address _____

City _____ State _____ Zip _____

Clip this coupon and mail with your remittance to: Resources for the Gifted, Inc., Dept. DA, 3421 North 44th Street, Phoenix, AZ 85018.

CLASSIFIED RATES

Per word (single insertion) 10 word min ..\$1.50
Per word 6 times in one contract year\$1.25
Per word 12 times in one contract year\$1.10

Classified Display: 1 time—\$90 per col. inch
6 times—\$80 per col. inch
12 times—\$70 per col. inch

Primary Circulation: 325,000

Copy should be received by the 15th of second month prior to issue. Adjustments on word count will be made if necessary. The Atlantic reserves the right to refuse advertisements which we consider to be of questionable taste or intent.

All Ads must be prepaid at the time you send in your insertion (if you are ordering more than one insertion, please send full amount to qualify for discount.)

Telephone numbers count as two words
Post Office Box Number count as two words.
Zip code counts as one word. We do not accept Atlantic box numbers at this time. If possible, please send sample or include brochure about product/service being advertised. This step will ensure insertion without delay.

Please write for additional information:

THE ATLANTIC MONTHLY

Classified Department

8 Arlington Street

Boston, Mass. 02116

THE ATLANTIC PUZZLER

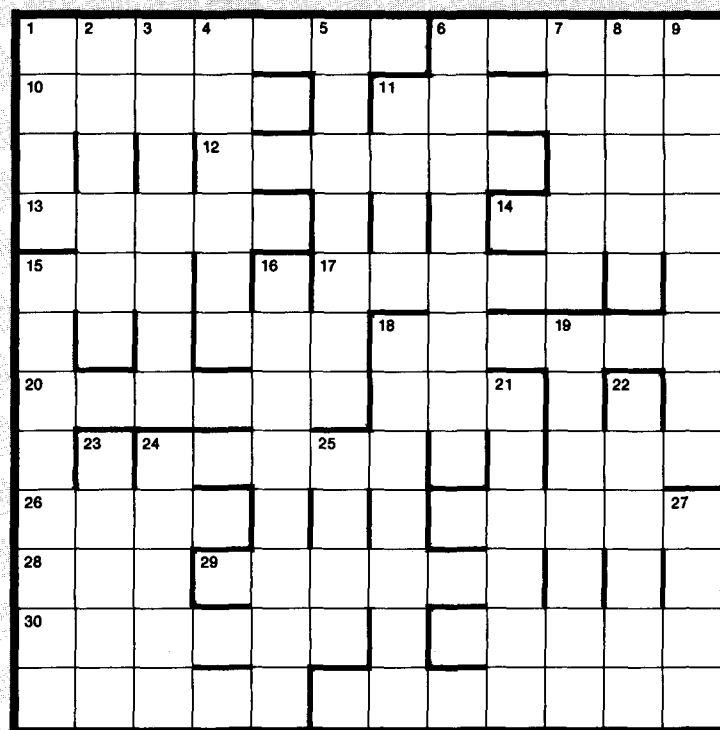
BY EMILY COX AND HENRY RATHVON

ACROSS AND DOWN

Ten unclued Across entries are related to the one unclued Down entry.

Answers include four proper nouns; 12A, 24A, and 5D may be unfamiliar; 28A and 25D are variant spellings; 15D is obsolete. Punctuation may be used deceptively.

The solution to last month's Puzzler appears on page 93.



ACROSS

1. Water transport in river is one pressed into service (7)
10. It brings relief round, just the way it appears (5)
11. Young starlet's place of worship (6)
12. Enzyme is pale liquid (6)
13. Character left from books and songs (5)
14. What could be found in a drunk's liver? (4)
17. Move back from falling crate (5)
18. Plaster stuff has jammed hoop—listen (6)
20. Cuban ballplayer, catcher initially (6)
24. Camus translated *The Flies* (5)
26. One loading gat, in a way (4)

28. Bird has merit in its sound (3)
29. Baseball team trailing around Newfoundland, e.g. (6)
30. Talk about metal that's smooth and glossy (6)

DOWN

2. Food brings badger into the open (6)
3. Having money, fool rises (7)
4. Medicine provided elevating stimulus (6)
5. What's in cigarettes: part of Algerian grass (7)
6. Person that's leaving will try topping a height (8)
7. Unexpected result from some lively tennis? (5)

8. Whoever made this puzzle is awfully cruel (5)
9. Perching place alien to herons (8)
11. Dull sort of cap donned by English (4)
15. Headmistress gets right up during rest (8)
16. Herb's plan sure flopped (8)
18. Subservient, like an Eastern European? (7)
19. University in Golden State assembled a token of peace (7)
21. Suitors swore falsely about love (6)
22. Servile people getting mostly laid up (6)
23. To cheer a body of law (5)
24. Ray is fellow mostly browned (5)
25. Fur company north of city (4)
27. Appropriate leadership lacking from *Post* (4)

Note: The instructions above are the special instructions for this month's puzzle. It is assumed that you know how to decipher clues. For a complete introduction to clue-solving, write to The Atlantic Reprint Department, enclosing a self-addressed, stamped envelope.

Great Ideas, one of a series

Photographer: Gene Ku



For a reprint suitable for fraternal organizations, write: Container Corporation of America, Dept. ASI-202, 33 West Monroe, Chicago, Illinois 60603

Container
Corporation
of America



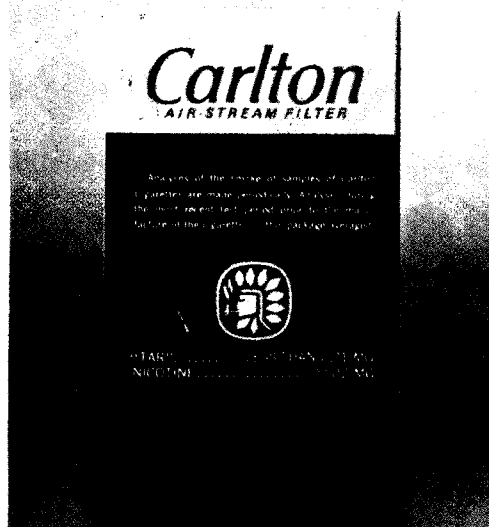
If we value the pursuit of knowledge
we must be free to follow
wherever that search may lead us.

Adlai Stevenson

1981 U.S. GOV'T REPORT: CARLTON LOWEST.

In the 17 U.S. Government Reports since 1970 no cigarette has ever been reported to be lower in tar than Carlton. Today's Carlton has even less tar than

the version tested for the Government's 1981 Report. Despite new low tar brands introduced since—**Carlton still lowest.**



10 packs of Carlton have less tar than 1 pack of...

	Tar Mg./Cig.	Nicotine Mg./Cig.
Benson & Hedges Light 100's	10	0.8
Kent	12	1.0
Marlboro Lights	11	0.8
Merit 100 Menthol	10	0.8
Salem Lights	9	0.7
Vantage 100's	9	0.9
Virginia Slims Lights	8	0.6
Winston Lights	11	0.9

Carlton is lowest.

Carlton Box—lowest of all brands.

Less than 0.01 mg. tar, 0.002 mg. nic. Carlton Menthol—Less than 1 mg. tar, 0.1 mg. nic.

Box: Less than 0.01 mg. "tar", 0.002 mg. nicotine av. per cigarette by FTC method.
Menthol: Less than 1 mg. "tar", 0.1 mg. nicotine;
Soft Pack: 1 mg. "tar", 0.1 mg. nicotine av. per cigarette, FTC Report May '81.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.